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## Monterey, California



**Hydrographic Data Along the California Coast  
from Pigeon Point to Cape San Martin  
May through July 1996**

by

Thomas A. Rago  
Curtis A. Collins  
John Steger

January 1997

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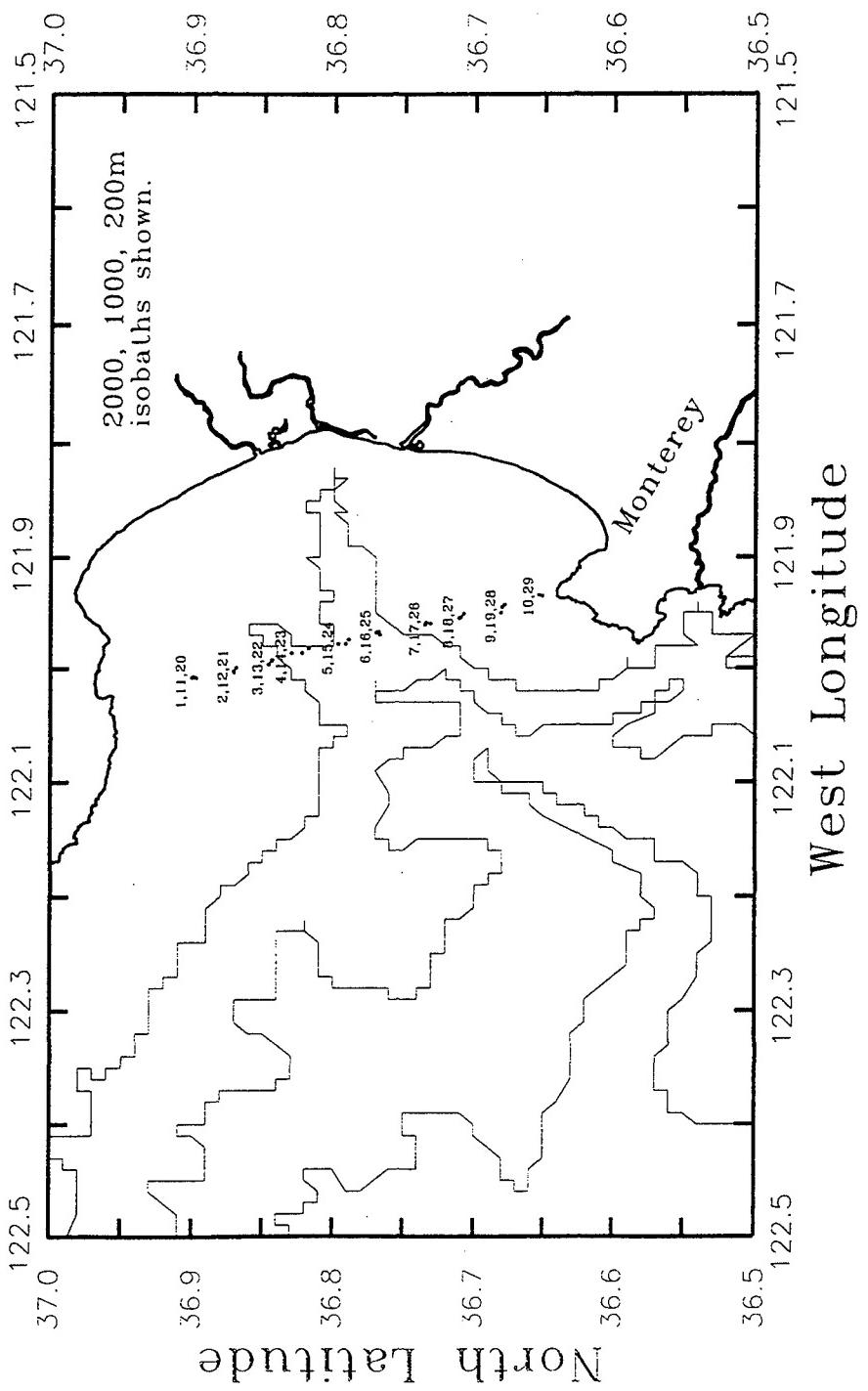
## INTRODUCTION

The Conductivity-Temperature-Depth (CTD) and Acoustic Doppler Current Profiler (ADCP) data included in this report were collected during two summer cruises from May to July 1996. The first cruise was conducted aboard the NOAA Ship *McArthur* in a series of five legs. CTD observations were made during the first, fourth, and fifth legs. The second cruise was conducted aboard the research vessel *Point Sur* in a series of two legs. The overall area of operations extended from Cape San Martin in the south to about Pigeon Point in the north ( $35^{\circ} 50.6'N$  to  $37^{\circ} 25.0'N$ ) and offshore as far as 90 kilometers (Figures 1-5). Sixty-one CTD casts were completed during the first cruise using the NOAA Ship *McArthur's* Seabird 911-Plus CTD, while another 102 CTDs were completed during the last cruise using a Neil Brown MKIII-b CTD. Listings of all 163 CTD stations occupied during these cruises are given in Tables A1 through A4 of the Appendix. Additionally, an ADCP was successfully operated throughout legs 4 and 5 of the NOAA Ship *McArthur* cruise and both legs of the R/V *Point Sur* cruise. An underway data acquisition loop also recorded 30-second averages of meteorological and near-surface oceanographic parameters during the latter cruise.

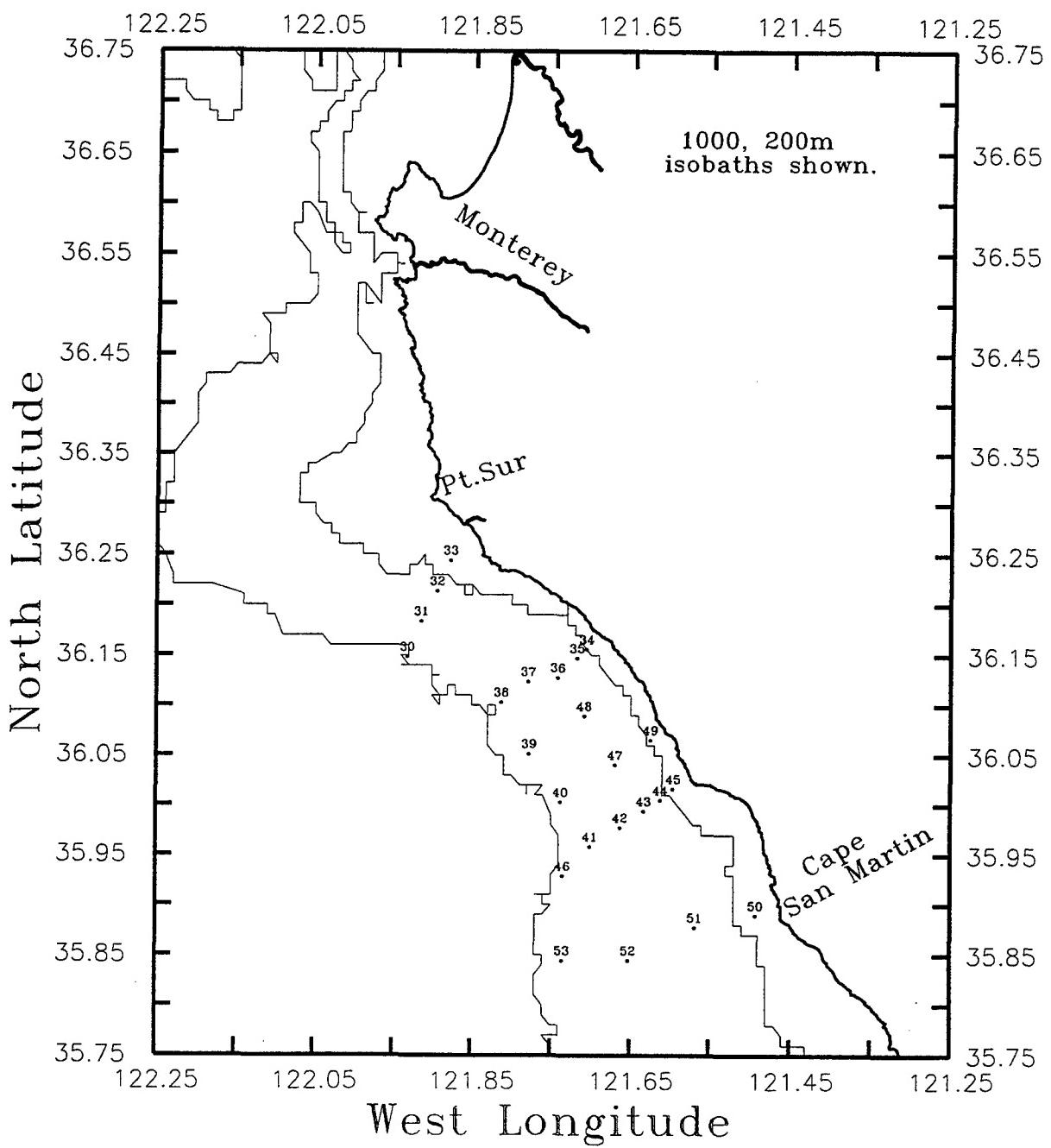
The specific scientific goals for legs 1 and 5 of the NOAA Ship *McArthur* cruise were to measure the sound velocity field between Pioneer Seamount and the SOSUS array at Point Sur in order to determine sound propagation paths from the ATOC (Acoustic Thermometry of the Ocean) array. Bad weather prevailed during leg 1, however; so a hydrographic section across Monterey Bay was sampled three times instead. The scientific goals for leg 4 of the cruise were to map the seafloor geology with side scan sonar and to map the currents and hydrographic conditions in the region of the Big Creek ecological preserve.

The scientific goals for the R/V *Point Sur* cruise were to again measure the sound velocity field between Pioneer Seamount and the SOSUS array at Point Sur and to sample the oceanographic conditions in the littoral region from Point Sur to about Pigeon Point. Hydrographic sections were occupied between the SOSUS array at Point Sur and Pioneer Seamount (the ATOC line) and along  $36^{\circ} 20'N$  off Point Sur-- the Naval Postgraduate School's traditional POST (Point Sur Transection) line-- during the first leg of the cruise. A coastal hydrographic survey was occupied northward from Monterey Canyon and a time series ( $\approx 27$  hours) of a pair of hydrographic stations in Monterey Bay was completed during the second leg of the cruise.

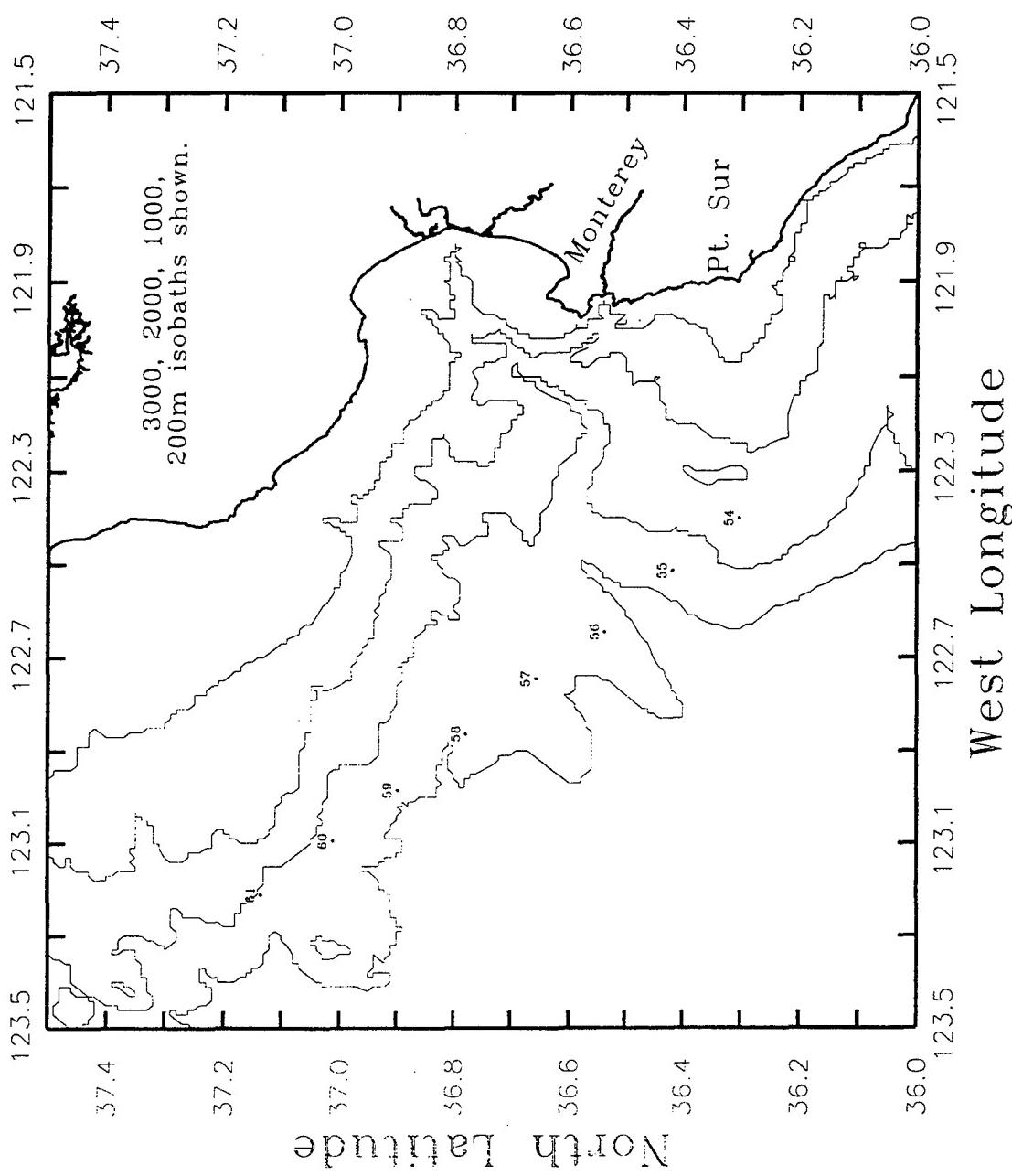
The personnel varied for each cruise, and are listed in Table 1.



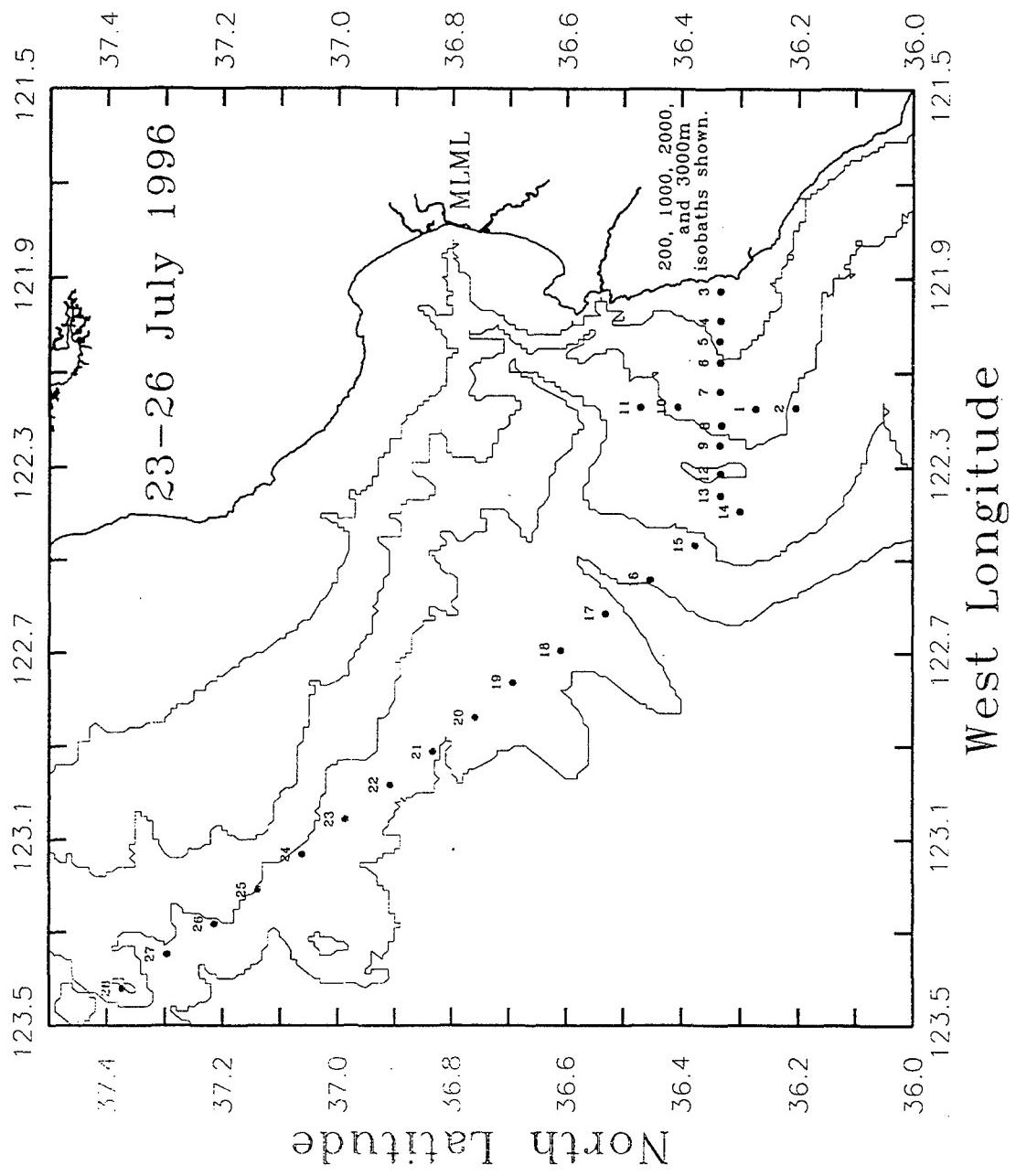
**Figure 1:** CTD station locations and numbers for the 22-27 May 1996 Leg 1 of the cruise aboard the NOAA Ship *McArthur*.



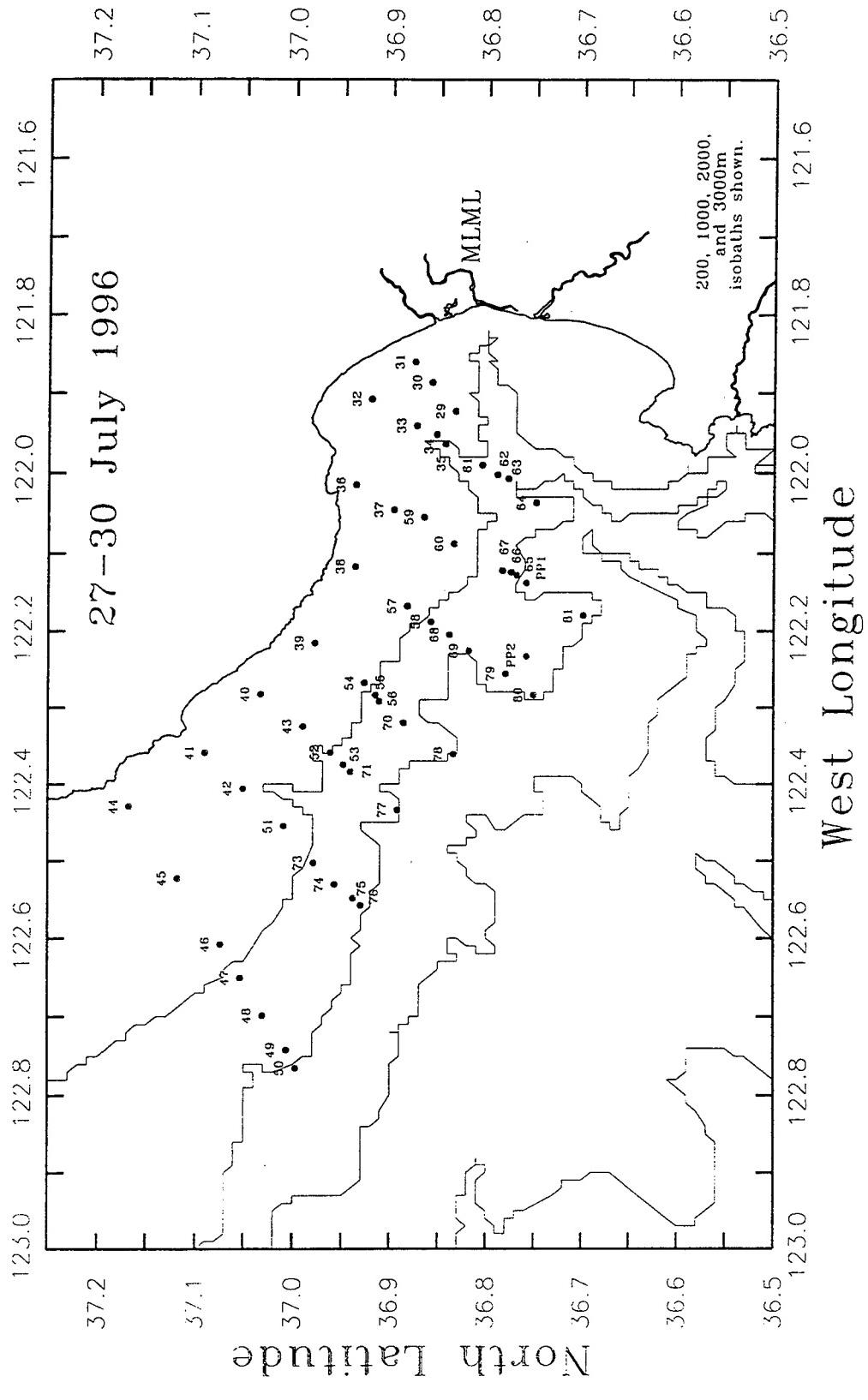
**Figure 2:** CTD station locations and numbers for the 2-6 June 1996 Leg 4 of the cruise aboard the NOAA Ship *McArthur*.



**Figure 3:** CTD station locations and numbers for the 6–8 June 1996 Leg 5 of the cruise aboard the NOAA Ship *McArthur*.



**Figure 4:** CTD station locations and numbers for the 23-26 July 1996 Leg 1 of the cruise aboard the R/V *Point Sur*.



**Figure 5:** CTD station locations and numbers for the 27-30 July 1996 Leg 2 of the cruise aboard the R/V *Point Sur*. CTD stations 82-102, and 104 alternated between sites PP2 and PP1.

**Table 1.** Cruise Participants (CTD work only)

<u>CRUISE 1 (LEG 1):</u> 22-27 May 1996, NOAA Ship <i>McArthur</i>	
Ms. Noriko L. Shoji	NOAA
Dr. Curtis Collins	Naval Postgraduate School
Mr. Andy Anderson	Naval Postgraduate School
Mr. Rob Bourke	Naval Postgraduate School
<u>CRUISE 1 (LEG 4):</u> 2-6 June 1996, NOAA Ship <i>McArthur</i>	
Ms. Noriko L. Shoji	NOAA
CDR Terry Jackson <sup>1</sup>	NOAA
Ms. Mary Yoklavich <sup>2</sup>	NOAA
LT John Steger	NOAA
<u>CRUISE 1 (LEG 5):</u> 6-8 June 1996, NOAA Ship <i>McArthur</i>	
Ms. Noriko L. Shoji	NOAA
Dr. Curtis Collins	Naval Postgraduate School
Mr. Tarry Rago	Naval Postgraduate School
Mr. Andy Anderson	Naval Postgraduate School
Mr. Rob Bourke	Naval Postgraduate School
<u>CRUISE 2 (LEG 1):</u> 23-26 July 1996, R/V <i>Point Sur</i>	
Dr. Curtis Collins <sup>1</sup>	Naval Postgraduate School
Dr. Peter Guest	Naval Postgraduate School
Mr. Tarry Rago	Naval Postgraduate School
Mr. Paul Jessen	Naval Postgraduate School
Mr. Andy Anderson	Naval Postgraduate School
LCDR David Collins (UK Navy)	Naval Postgraduate School
LT Michael Fisher	Naval Postgraduate School
LT Carl Hager	Naval Postgraduate School
LCDR Thierry Morvillez (French Navy)	Naval Postgraduate School
LCDR Eugene Tramm	Naval Postgraduate School
<u>CRUISE 2 (LEG 2):</u> 27-30 July 1996, R/V <i>Point Sur</i>	
Dr. Curtis Collins <sup>1</sup>	Naval Postgraduate School
Dr. Peter Guest	Naval Postgraduate School
Mr. Tarry Rago	Naval Postgraduate School
Mr. Mike Cook	Naval Postgraduate School
Mr. Andy Anderson	Naval Postgraduate School
LT Bryan Brauns	Naval Postgraduate School
LT James Crouch (Australian Navy)	Naval Postgraduate School
LT James Sires	Naval Postgraduate School
LCDR Rebecca Stone	Naval Postgraduate School
Mr. Jeff Jenner	Naval Postgraduate School
Mr. Adam Compton	Naval Postgraduate School

1 = Chief Scientist      2 = Principal Investigator

## **HYDROGRAPHIC DATA ACQUISITION AND CALIBRATION**

### **A) Seabird 911-Plus CTD (NOAA Ship *McArthur*)**

For the NOAA Ship *McArthur* cruise, hydrographic data were collected using a SeaBird 911-Plus CTD. A rosette sampler was attached to the CTD and was equipped with twelve 1.3-liter Niskin bottles for *in situ* water sampling. A water sample from the deepest depth of the cast, and often two water samples-- one at the deepest depth of the cast and one near the surface-- was collected during the upcast at each station for salinity calibration. The CTD data were collected and processed using a software package developed by Seabird, Inc. CTD data were acquired on both down and up casts; but generally only the downcast data were used. A lowering speed of approximately  $30 \text{ m min}^{-1}$  was used to the bottom of the thermocline ( $\approx 100\text{-}150 \text{ m}$ ), then

$60 \text{ m min}^{-1}$  to the bottom of the cast. The data were acquired using a personal computer.

The temperature and pressure sensors were calibrated prior to the cruise. The pressure sensor on this CTD is a Model 410K-105 Paroscientific, Inc., transducer (serial #60961). It was calibrated by the company on 9 April 1996. The temperature sensor on this CTD is a Seabird, Inc., SBE3-plus thermistor (serial #2126, 6800-m depth rating), while the conductivity sensor is a Seabird, Inc., SBE4-0210 (serial #1697). Both sensors were calibrated by the company, the thermistor on 26 March 1996 and the conductivity probe on 2 April 1996.

A total of 73 water samples was taken at 61 Seabird CTD stations during this first cruise for calibration of the CTD salinity data. The CTD pressure, conductivity, and temperature were recorded as each sample was taken. These numbers, after applying the appropriate calibration coefficients, were used to calculate salinity and the results compared with the water sample salinities determined using a Guildline Autosal 8400B salinometer at the Naval Postgraduate School (legs 1 and 5) and another Guildline Autosal 8400 (serial #42.189) aboard the NOAA Ship *McArthur* (leg 4). The station, depth of sample, CTD salinity calculated using the appropriate calibrations, water sample salinity from the salinometer, and difference between CTD and salinometer salinities are listed in Table 2. The mean and standard deviation of the differences between the CTD salinities and sample salinities were calculated for each leg of the cruise. Data points greater than two standard deviations from the mean were discarded. The mean of the remaining salinity differences (65 data points) was calculated to be  $S=0.0102$ ,  $S=0.0120$ , and  $S=0.0106$  for each respective leg. Based on these mean differences, a global offset of 0.011 was added to the CTD salinity data. The differences between the CTD and salinometer salinities were then recomputed, yielding a standard deviation of the differences of  $S=0.0036$ ,  $S=0.0020$ , and  $S=0.0019$  for each leg of the cruise. These were the final adjustments to the Seabird CTD salinity.

**Table 2.** List of CTD salinities (calculated from the corrected pressure, temperature, and conductivity readings), water sample salinities (measured by the Guildline Autosal salinometer of samples collected at the same depths from which the CTD salinities were measured), and the differences between the two sets of salinities for the three legs of the NOAA Ship *McArthur* cruise (22-27 May, 2-6 June, and 6-8 June 1996). Different legs of the cruise are separated by dashed lines.

Station Number	Pressure (dbar)	Salinity		Salinity Difference
		CTD	Bottle	
1	29.4	33.7512	33.732	-0.0192
2	41.4	33.8421	33.851	0.0089
3	83.4	33.9791	33.981	0.0019
4	426.4	34.1913	34.202	0.0107
5	255.7	34.1140	34.124	0.0100
6	800.0	34.3659	34.379	0.0131
7	87.7	33.9296	33.937	0.0074
8	84.8	33.9300	33.939	0.0090
9	74.7	33.9397	33.954	0.0143
10	61.2	33.9405	33.953	0.0125
11	27.5	33.6873	33.686	-0.0013
12	44.4	33.7658	33.771	0.0052
13	79.8	33.9660	33.981	0.0150
15	329.3	34.1629	34.179	0.0161
16	731.7	34.3436	34.356	0.0124
17	101.7	33.9897	33.995	0.0053
18	92.9	33.9438	33.952	0.0082
19	86.9	33.9384	33.950	0.0116
20	31.9	33.8208	33.837	0.0162
21	39.4	33.8316	33.841	0.0094
22	74.6	33.9066	33.914	0.0074
23	405.7	34.1850	34.196	0.0110
24	281.0	34.1224	34.132	0.0096
25	729.9	34.3351	34.347	0.0119
26	91.7	33.9655	33.970	0.0045
27	87.1	33.9507	33.962	0.0113
28	76.6	33.9411	33.954	0.0129
29	54.0	33.9202	33.930	0.0098
30	45.0	33.8801	33.891	0.0109
31	307.0	34.1764	34.186	0.0096
32	461.0	34.2254	34.237	0.0116
33	504.0	34.2305	34.242	0.0115
34	509.0	34.2256	34.259	0.0334
36	517.0	34.2121	34.228	0.0159
37	493.0	34.2037	34.215	0.0113

**Table 2. (continued)**

Station Number	Pressure (dbar)	Salinity		Salinity Difference
		CTD	Bottle	
38	504.0	34.1846	34.197	0.0124
39	516.0	34.2061	34.200	0.0061
40	340.0	34.1804	34.197	0.0166
41	100.0	33.9539	33.965	0.0111
42	59.0	33.8878	33.900	0.0122
43	444.0	34.2263	34.235	0.0087
44	503.0	34.2442	34.256	0.0118
45	505.0	34.2766	34.289	0.0124
46	509.0	34.2464	34.240	-0.0064
47	504.0	34.2295	34.241	0.0115
48	504.0	34.2394	34.253	0.0136
49	84.0	33.9673	33.978	0.0107
50	43.0	33.9187	33.930	0.0113
52	506.0	34.2113	34.223	0.0117
53	504.0	34.2654	34.279	0.0136
<hr/>				
54	1430.0	34.5196	34.529	0.0094
	998.0	34.4460	34.457	0.0110
	3.3	33.7518	33.768	0.0162
55	2809.0	34.6457	34.656	0.0103
	1999.0	34.5971	34.608	0.0109
	999.0	34.4484	34.457	0.0086
	0.0	33.6334	33.645	0.0116
56	2745.0	34.6490	34.660	0.0110
	1000.0	34.4539	34.466	0.0121
	7.4	33.4481	33.455	0.0069
57	1003.0	34.4481	34.457	0.0089
	1.9	33.4941	33.505	0.0109
58	2672.8	34.6463	34.657	0.0107
	1002.0	34.4440	34.454	0.0100
	1.7	33.1900	33.204	0.0140
60	2228.0	34.6172	34.626	0.0088
	2225.0	34.6168	34.627	0.0102
	998.0	34.4374	34.447	0.0096
61	2004.0	34.6064	34.616	0.0096
	2004.0	34.6064	34.617	0.0106
	995.0	34.4399	34.450	0.0101
	1.2	33.2796	33.292	0.0124
<hr/>				

### **B) Neil Brown MKIII-b CTD (R/V Point Sur)**

For the R/V *Point Sur* cruise, hydrographic data were collected using a Neil Brown MKIII-b CTD. A General Oceanics rosette sampler was attached to the CTD and was equipped with eleven 5-liter Niskin bottles for *in situ* water sampling. Generally, two water samples--one at the deepest depth of the cast and one near the surface--were collected during the upcast at each station for salinity calibration. A Sea Tech Inc. 25-cm transmissometer was also attached to the CTD, and its raw data stream was incorporated with that of the CTD itself. The CTD sampling rate was 32 Hz, and raw data were collected using a software package developed by EG&G Marine Instruments. CTD data were acquired on both down and up casts; but generally only the downcast data were preserved. A lowering speed of approximately  $30 \text{ m min}^{-1}$  was used to the bottom of the thermocline ( $\approx 100\text{-}150 \text{ m}$ ), then  $60 \text{ m min}^{-1}$  to the bottom of the cast. The data were acquired using an HP Vectra computer.

The temperature and pressure sensors were calibrated shortly before the cruise. The pressure calibration was carried out using a Chandler Engineering deadweight tester as a standard. Indicated pressures from the standard and the CTD sensor were recorded at 19 approximately equally spaced pressures from 0 to 3100 dbar. Regressions were then performed fitting the CTD pressures to the standard. The result yielded a linear fit (rms residual = 0.6705 dbar) with a slope of 1.001. The CTD pressure offset recorded on deck at the beginning of each cast was used as the intercept.

The temperature calibration was done using a Rosemount platinum resistance thermometer (SPRT) as a standard. This standard sensor is periodically recalibrated in the laboratory using water's triple point and gallium's melt point as references. A temperature bath of 70-80 liters of fresh water in an insulated tub was used to compare the standard and CTD sensor at  $1^\circ\text{C}$  increments from  $1^\circ$  to  $18^\circ\text{C}$ . Thirty data points were collected at each temperature and then averaged to yield a single value for each step. A regression was run on the 18 data points, revealing a linear difference between the standard and the CTD temperature sensor. The coefficients were 0.9997 (slope) and  $+0.0031^\circ\text{C}$  (intercept), while the rms residual was  $0.0004^\circ\text{C}$ .

A total of 215 water samples was taken at 102 CTD stations during the last cruise for calibration of the Neil Brown CTD salinity data. The CTD pressure, conductivity, and temperature were recorded as each sample was taken. These numbers, after applying the appropriate calibration coefficients, were used to calculate salinity and the results compared with the water sample salinities determined using a Guildline Autosal 8400B salinometer at the Naval Postgraduate School. The station, depth of sample, CTD salinity calculated using the appropriate calibrations, water sample salinity from the salinometer, and difference between CTD and salinometer salinities (the salinity offset) are listed in Table 3. Unfortunately, the Neil Brown CTD exhibited a highly variable station-to-station salinity offset during the cruise, which prevented our using a global calibration correction for these CTD data. Instead, corrections were made for each

individual CTD cast based upon its measured salinity offsets. Table 3 lists the average/best offset for each CTD cast, as well as the salinity correction that was actually applied to the CTD data. It should be noted that there is a dramatic change in the salinity offset for CTD casts 68-85. This was due to problems that arose with the Autosal salinometer, and resulted in a salinity offset of about -0.020 that had nothing to do with the Neil Brown CTD. Other corrections were made to these CTD salinity data because of biological fouling, as follows:

Station	2:	247-253m, S=34.1738
Station	50:	used upcast
Station	63:	500m-bottom, used upcast
Station	81:	used upcast
Station	91:	400-700m, used upcast
Station	92:	650-700m, used upcast
Station	94:	used upcast
Station	97:	used upcast
Station	101:	769-815, used upcast
Station	101:	1163-1173m, used upcast
Station	101:	0-170, used upcast transmissivity

These were the final adjustments to the Neil Brown CTD salinity.

#### **HYDROGRAPHIC DATA PROCESSING**

The raw CTD data were processed on a PC-compatible computer system. The software automatically flags suspicious pressure, conductivity, temperature, and transmissivity (if collected) data based on user-specified first difference criteria, and allows the user to examine and interpolate across flagged data if necessary. After the elimination through interpolation of any bad data, salinity was calculated from corrected values of temperature, pressure, and conductivity according to the algorithm of Lewis and Perkin (1981) and utilizing a dual time lag filter to remove time lag spikes. The data were then averaged to 2 dbar. The final salinity correction (as described above) was then applied.

#### **ADCP DATA ACQUISITION AND CALIBRATION**

The Acoustic Doppler Current Profiler (ADCP) data were collected using an RD Instruments vessel-mounted ADCP (VM-ADCP) with a nominal frequency of 300 kHz (NOAA Ship *McArthur*)/150 kHz (R/V *Point Sur*). Data were collected using a 386-type PC and the Data Acquisition Software (DAS) provided by RD Instruments in up to 64 eight-meter bins over a three-minute sampling ensemble. Navigation information was supplied to the DAS from a GPS (NOAA Ship *McArthur*)/Trimble Model 10X GPS (R/V *Point Sur*) receiver. The data were collected on 1.2M 3.5" floppy diskettes, with approximately 25 hours of data on each diskette. Calibration runs were made during the fourth and fifth legs

**Table 3.** List of CTD salinities (calculated from the corrected pressure, temperature, and conductivity readings), water sample salinities (measured by the Guildline Autosal salinometer of samples collected at the same depths from which the CTD salinities were measured), the differences (both actual for each sample and averaged/best for the station) between the two sets of salinities, and the salinity offset corrections applied at each station for the two legs of the R/V *Point Sur* cruise (23-26 and 27-30 June 1996). The different legs of the cruise are separated by dashed lines.

Station Number	Pressure (dbar)	Salinity		Salinity Difference		Correction Applied
		CTD	Bottle	Actual	Avg/Best	
1	815.8	34.4042	34.402	-0.0022	0.000	0.000
	1.7	33.7528	33.755	0.0022		
2	1021.0	34.4453	34.444	-0.0013	-0.002	0.000
	1.8	33.7723	33.770	-0.0023		
3	48.3	33.8712	33.864	-0.0072	-0.005	0.000
	47.7	33.8699	33.864	-0.0059		
	2.5	33.8006	33.862	0.0614		
	1.9	33.8003	33.803	0.0027		
4	101.8	33.9533	33.948	-0.0053	-0.005	0.000
	101.7	33.9546	33.951	-0.0036		
	1.9	33.7598	33.753	-0.0068		
5	132.8	33.9905	33.983	-0.0075	-0.004	0.000
	2.2	33.7563	33.756	-0.0003		
6	257.2	34.1485	34.144	-0.0045	-0.004	0.000
	2.0	33.7533	33.749	-0.0043		
7	664.5	34.3286	34.328	-0.0006	-0.001	0.000
8	916.3	34.4381	34.437	-0.0011	-0.001	0.000
	1.3	33.7548	33.754	-0.0008		
9	989.9	34.4568	34.452	-0.0048	-0.005	0.000
	1.9	33.7543	33.750	-0.0043		
10	862.2	34.4169	34.415	-0.0019	-0.003	0.000
	2.4	33.7548	33.750	-0.0048		
11	1283.3	34.5212	34.522	0.0008	-0.003	0.000
	1010.4	34.4593	34.454	-0.0053		
	1.7	33.6722	33.668	-0.0042		
12	966.0	34.4458	34.441	-0.0048	-0.005	0.005
	2.3	33.7610	33.756	-0.0050		
13	1231.1	34.5303	34.525	-0.0053	-0.006	0.006
	1.7	33.7621	33.755	-0.0071		
14	1453.6	34.5549	34.546	-0.0089	-0.008	0.008
	1011.3	34.4650	34.458	-0.0070		
	1.1	33.7625	33.755	-0.0075		
15	2303.5	34.6379	34.632	-0.0059	-0.006	0.006
	1012.9	34.4637	34.457	-0.0067		
	1.1	33.5906	33.585	-0.0056		
16	3019.7	34.6735	34.664	-0.0097	-0.010	0.010
17	2706.3	34.6650	34.661	-0.0040	-0.004	0.004
	1.0	33.5840	33.580	-0.0040		
18	2833.9	34.6668	34.664	-0.0028	-0.003	0.003
	2.0	33.5893	33.586	-0.0033		

**Table 3. (continued)**

Station Number	Pressure (dbar)	Salinity		Salinity Difference		Correction Applied
		CTD	Bottle	Actual	Avg/Best	
19	736.0	34.6574	34.468	-0.1894		
	2.5	33.5981	33.594	-0.0041	-0.004	0.004
20	2518.2	34.6477	34.643	-0.0047		
	2517.6	34.6485	34.643	-0.0055	-0.004	0.004
21	1013.4	34.4696	34.466	-0.0036		
	1065.3	34.4711	34.471	-0.0001		
22	2.5	33.7029	33.703	0.0001	0.000	0.000
	2692.2	34.6611	34.659	-0.0021		
23	1014.5	34.4615	34.465	0.0035	0.001	0.000
	2.4	33.5178	33.536	0.0182		
24	2181.9	34.6208	34.627	0.0062		
	2.1	33.7123	33.719	0.0067	0.006	-0.006
25	2129.0	34.6103	34.625	0.0147		
	2.1	33.7398	33.751	0.0112	0.013	-0.013
26	1994.5	34.5982	34.607	0.0088		
	2.3	33.4589	33.472	0.0131	0.011	-0.011
27	1996.6	34.6123	34.612	-0.0003		
	971.3	34.4367	34.436	-0.0007	0.000	0.000
28	2.4	33.5123	33.513	0.0007		
	2489.6	34.6486	34.651	0.0024		
29	1012.9	34.4544	34.456	0.0016	0.002	0.000
	1.8	33.2648	33.261	-0.0038		
30	945.5	34.4321	34.433	0.0009		
	2.3	33.2700	33.269	-0.0010	0.000	0.000
31	71.2	33.9173	33.918	0.0007		
	71.0	33.9162	33.916	-0.0002	0.001	0.000
32	42.7	33.8588	33.855	-0.0038		
	42.7	33.8588	33.855	-0.0038	-0.004	0.000
33	2.4	33.8049	33.809	0.0041		
	10.2	33.8034	33.826	0.0226		
34	10.0	33.8196	33.824	0.0044	0.003	0.000
	2.4	33.8222	33.824	0.0018		
35	11.4	33.7956	33.799	0.0034		
	2.6	33.8197	33.824	0.0043	0.003	0.000
36	44.0	33.8724	33.870	-0.0024		
	2.9	33.8047	33.808	0.0033	-0.002	0.000
37	83.9	33.9327	33.931	-0.0017		
	3.1	33.7936	33.811	0.0174	-0.002	0.000
38	234.2	34.0979	34.098	0.0001		
	2.1	33.8245	33.809	-0.0155	0.000	0.000
39	17.8	33.8413	33.844	0.0027		
	2.6	33.7854	33.810	0.0246	0.003	0.000
40	53.0	33.8951	33.892	-0.0031		
	2.8	33.8846	33.821	-0.0636	-0.003	0.000
41	38.2	33.8694	33.867	-0.0024		
	2.8	33.7977	33.802	0.0043	0.001	0.000
42	46.4	33.8152	33.815	-0.0002		
	2.5	33.7794	33.780	0.0006	0.000	0.000
43	52.5	33.8647	33.866	0.0013		
	2.8	33.7745	33.774	-0.0005	0.000	0.000

**Table 3. (continued)**

Station Number	Pressure (dbar)	Salinity		Salinity Difference		Correction Applied
		CTD	Bottle	Actual	Avg/Best	
41	40.8	33.8065	33.806	-0.0005		
	2.2	33.8020	33.803	0.0010	0.000	0.000
42	92.7	33.9067	33.909	0.0023		
	3.1	33.7346	33.737	0.0024	0.002	0.000
43	91.4	33.9316	33.933	0.0014		
	2.7	33.7753	33.779	0.0037	0.003	0.000
44	44.2	33.8197	33.825	0.0053		
	2.6	33.8354	33.838	0.0026	0.004	0.000
45	93.8	33.8762	33.875	-0.0012		
	2.0	33.7104	33.712	0.0016	0.000	0.000
46	110.4	33.9597	33.958	-0.0017		
	2.4	33.6305	33.630	-0.0005	-0.001	0.000
47	266.7	34.1509	34.148	-0.0029		
	2.0	33.5457	33.542	-0.0037	-0.003	0.000
48	500.0	34.2557	34.267	0.0113		
	2.5	33.4324	33.432	-0.0004	0.000	0.000
49	770.0	34.3383	34.339	0.0007		
	2.0	33.5106	33.513	0.0024	0.002	0.000
50	988.1	34.3589	34.438	0.0791		
	503.6	34.1827	34.188	0.0053	0.005	0.005
51	2.1	33.6067	33.611	0.0043		
	112.7	33.9200	33.920	0.0000		
52	2.7	33.6943	33.697	0.0027	0.001	0.000
	247.3	34.1664	34.169	0.0026		
53	1.9	33.6155	33.640	0.0245	0.003	0.000
	497.5	34.2536	34.259	0.0054		
54	2.0	33.6429	33.652	0.0091	0.007	-0.005
	90.2	33.8832	33.891	0.0078		
55	2.4	33.7920	33.799	0.0070	0.007	-0.007
	256.9	34.1354	34.142	0.0066		
56	2.4	33.7847	33.794	0.0093	0.008	-0.008
	498.3	34.2081	34.233	0.0249		
57	2.0	33.7658	33.781	0.0152	-----	-0.008
	89.8	33.9318	33.941	0.0092	0.008	-0.008
58	2.7	33.7930	33.800	0.0070		
	247.5	34.1377	34.143	0.0053		
59	2.7	33.7764	33.796	0.0196	0.005	-0.005
	75.4	33.9303	33.934	0.0037		
60	3.4	33.8084	33.809	0.0006	0.004	-0.005
	90.5	33.9557	33.960	0.0043		
61	2.8	33.7712	33.778	0.0068	0.006	-0.005
	477.8	34.2192	34.237	0.0178		
62	2.7	33.8045	33.800	-0.0045	0.018	-0.018
	790.6	34.3684	34.392	0.0236		
63	2.5	33.7740	33.784	0.0100	0.024	-0.023
	1001.6	34.4563	34.464	0.0077		
64	2.5	33.7600	33.780	0.0200	0.008	-0.008
	934.1	34.4143	34.423	0.0087		
65	2.7	33.7384	33.750	0.0116	0.009	-0.009
	985.6	34.4046	34.418	0.0134		
	2.2	33.7507	33.759	0.0083	0.011	-0.011

**Table 3. (continued)**

Station Number	Pressure (dbar)	Salinity		Salinity Difference		Correction Applied
		CTD	Bottle	Actual	Avg/Best	
66	639.5	34.2638	34.276	0.0122		
	2.3	33.7640	33.776	0.0120	0.012	-0.012
67	505.4	34.2253	34.235	0.0097		
	2.1	33.7557	33.788	0.0323	0.010	-0.010
68	587.6	34.2807	34.315	0.0343		
	2.0	33.7842	33.814	0.0298	0.032	-0.014
69	764.0	34.3366	34.379	0.0424		
	2.3	33.7709	33.802	0.0311	0.037	-0.018
70	706.5	34.3113	34.352	0.0407		
	2.8	33.6596	33.694	0.0344	0.038	-0.019
71	808.0	34.3420	34.378	0.0360		
	1.4	33.6731	33.707	0.0339	0.035	-0.016
73	243.5	34.1460	34.183	0.0370		
	2.5	33.5473	33.573	0.0257	0.031	-0.013
74	486.3	34.2076	34.244	0.0364		
	1.7	33.4994	33.527	0.0276	0.032	-0.014
75	817.5	34.3780	34.412	0.0340		
	1.7	33.5163	33.546	0.0297	0.032	-0.013
76	974.6	34.4172	34.449	0.0318		
	1.9	33.5337	33.560	0.0263	0.029	-0.010
77	1021.7	34.4357	34.460	0.0243		
	2.0	33.6796	33.706	0.0264	0.025	-0.006
78	1022.6	34.4265	34.473	0.0465		
	1.9	33.6820	33.711	0.0290	-----	-0.006
79	749.4	34.3443	34.377	0.0327		
	2.3	33.7703	33.800	0.0297	0.031	-0.006
80	1012.8	34.4552	34.497	0.0418		
	1.9	33.7640	33.789	0.0250	-----	-0.006
81	969.4	34.4555	34.485	0.0295		
	2.4	33.7181	33.776	0.0579	-----	-0.006
82	727.1	34.3599	34.371	0.0111		
	2.3	33.7715	33.784	0.0125	0.012	0.008
83	1214.0	34.5293	34.543	0.0137		
	2.0	33.7569	33.767	0.0101	0.012	0.008
84	735.8	34.3500	34.364	0.0140		
	2.6	33.7717	33.785	0.0133	0.014	0.008
85	1213.7	34.5156	34.532	0.0164		
	1213.6	34.5155	34.529	0.0135	0.017	0.008
86	2.8	33.7553	33.773	0.0177		
	733.7	34.3615	34.352	-0.0095		
87	2.9	33.7694	33.766	-0.0034	-0.010	0.008
	1185.4	34.4952	34.486	-0.0092		
88	2.0	33.7564	33.746	-0.0104	-0.010	0.008
	750.6	34.3559	34.350	-0.0059	-0.006	0.008
89	1175.5	34.5026	34.492	-0.0106		
	2.5	33.7594	33.748	-0.0114	-0.011	0.008
90	746.5	34.3467	34.341	-0.0057		
	2.2	33.7659	33.757	-0.0089	-0.007	0.008
91	1176.8	34.5265	34.525	-0.0013		
	1.4	33.7555	33.746	-0.0095	-0.005	0.008
92	734.7	34.3307	34.323	-0.0077		
	2.2	33.7664	33.760	-0.0064	-0.007	0.008

**Table 3. (continued)**

Station Number	Pressure (dbar)	Salinity		Salinity Difference		Correction Applied
		CTD	Bottle	Actual	Avg/Best	
93	1190.1	34.5113	34.501	-0.0103		
	1.8	33.7477	33.740	-0.0077	-0.009	0.008
94	745.6	34.3352	34.326	-0.0092		
	2.0	33.7704	33.760	-0.0104	-0.010	0.008
95	1189.2	34.4994	34.491	-0.0084		
	1.7	33.7372	33.728	-0.0092	-0.009	0.008
96	738.3	34.3391	34.332	-0.0071		
	2.5	33.7644	33.755	-0.0094	-0.008	0.008
97	1136.2	34.4723	34.466	-0.0063		
	1.7	33.7311	33.728	-0.0031	-0.005	0.008
98	721.4	34.3377	34.334	-0.0037		
	1.7	33.7501	33.748	-0.0021	-0.003	0.003
99	1148.7	34.4751	34.476	0.0009		
	2.1	33.7439	33.738	-0.0059	-0.003	0.003
100	722.6	34.3121	34.322	0.0099		
	2.0	33.7308	33.739	0.0082	0.009	-0.010
101	1191.9	34.5064	34.518	0.0116		
	1.7	33.7453	33.749	0.0037	0.008	-0.012
102	732.5	34.3498	34.352	0.0022		
	2.2	33.7335	33.738	0.0045	0.003	0.000
104	1220.7	34.5143	34.514	-0.0003		
	2.0	33.7410	33.741	0.0000	0.000	0.000

of the first cruise (NOAA Ship *McArthur*), and during each leg of the second cruise (R/V *Point Sur*), to quantify rotation and sensitivity errors in the ADCP data. Rotation error ( $\alpha$ ) is made up of two components. The first is any alignment error between the centerline of the ship and that of the mounted instrument, while the second is gyroscopic compass error. The sensitivity error ( $\beta$ ) is generally very small and is due to errors in beam geometry. A thorough description of these errors and the methods used to quantify them may be found in Joyce (1989). The calibration run consisted of two transections, both made with the bottom tracking feature of the ADCP switched on. Following the methods of Joyce (1989), we calculated the following calibration coefficients:  $\alpha = 4.9738$  and  $1+\beta = 0.99218$  (NOAA Ship *McArthur*) and  $\alpha = 1.380/1.553$  and  $1+\beta = 1.003/1.007$  (leg1/leg2, R/V *Point Sur*). Raw doppler velocity data were rotated by  $\alpha$  and multiplied by  $1+\beta$  before any further processing of the data.

#### ADCP DATA PROCESSING

ADCP data were processed one diskette (approximately 25 hours) at a time. Once the raw data were corrected for rotation and sensitivity errors as described above, the first step of data processing was the correction of navigation data and the calculation of ship's velocity. Geographic positions as recorded by the DAS at the end of each three-minute ensemble were checked for obviously bad data points and corrected by interpolation if necessary. Once corrected, these data were then used to calculate the u (eastward) and v (northward) components of ship's velocity.

The next processing step was the determination of the depth (bin number) to which data remained reliable for each three-minute ensemble. This depth is a function of either the bottom depth or the Percent Good Return (PGR). The PGR is the percentage of pings for a given ensemble having good solutions based either on a signal-to-noise threshold or on error velocity. If the PGR fell below 50% for a given bin, the data in that and all deeper bins for that ensemble were eliminated from further consideration.

The bottom depth provided another limit for the deepest bin of good data if the bottom were shallower than about 150m (NOAA Ship *McArthur*)/350m (R/V *Point Sur*). Bottom depth could be determined directly when the bottom tracking option was turned on, or by a sharp subsurface increase in the Acoustic Gain Control (AGC) signal when the bottom tracking was turned off. The shallowest bin as determined by PGR or bottom depth was defined as the bin to which data remained reliable for a given ensemble.

The next step in processing the ADCP data was the calculation of a reference layer velocity. A reference layer three bins wide (24m) was used for these data. Choosing the depth of the reference layer is somewhat arbitrary. However, the general criterion used was to choose a reference layer sufficiently deep that the velocity within the layer was nearly constant, but not so deep that most or all of the ensembles being processed would not have good data down to the depth of the

reference layer. The bins used to define a reference layer were not necessarily the same for each diskette of ADCP data.

An absolute reference layer velocity was calculated by subtracting the u and v components of ship's velocity from the u and v components of the raw reference layer velocity. The absolute reference layer velocity was then smoothed by applying a low-pass filter with a cutoff period of 25 minutes.

Once a smoothed absolute reference layer velocity had been determined, the raw velocity profiles of each ensemble were adjusted to the filtered reference layer velocity to yield the final (3-minute) absolute water velocity profiles. Each ensemble was then finally examined visually for any remaining bad profiles that might have slipped through the preceding processing.

## **DATA PRESENTATION**

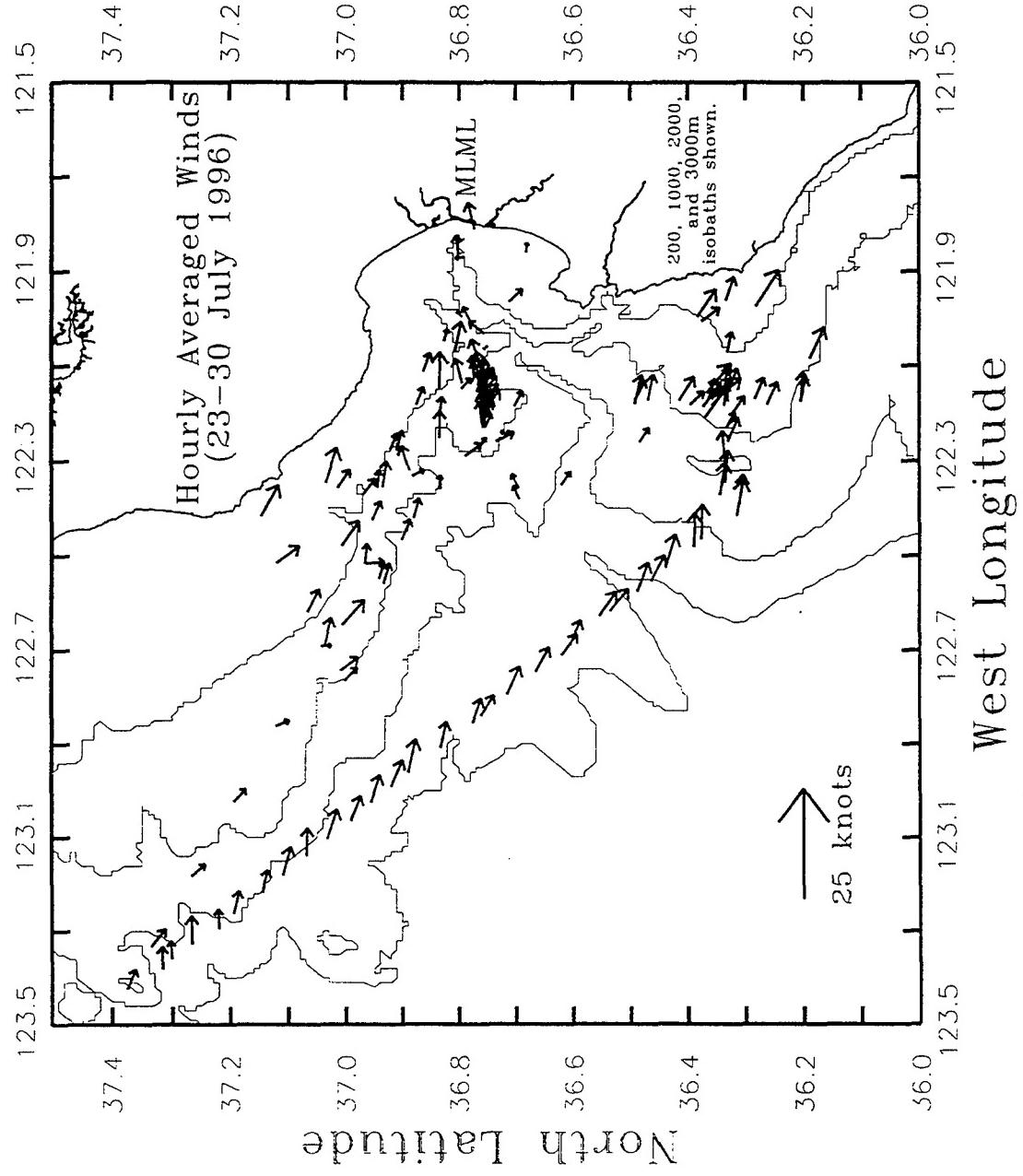
The CTD station positions and numbers for the three legs of the NOAA Ship *McArthur* cruise are shown in Figures 1-3, while those for the two legs of the R/V *Point Sur* cruise are shown in Figures 4-5. Hourly averaged wind vectors (collected by the underway data acquisition loop) during both legs of the R/V *Point Sur* cruise are shown in Figure 6. Figures 7 and 8 are ADCP-derived currents for the depth range 15-23m during the last two legs of the NOAA Ship *McArthur* cruise; Figures 9 and 10 are the corresponding ADCP-derived currents during the two legs of the R/V *Point Sur* cruise. Figures 11-13 are T/S diagrams which include data from all the CTD stations completed during each of the legs of the first cruise. Figure 14 is a T/S diagram which includes all the CTD stations completed during both legs of the second cruise. Finally, Figure 15 is a composite T/S diagram of the previous four T/S diagrams, and includes all the CTD stations completed during both cruises.

Tables A1 through A4 are data listings at selected pressures of the CTD hydrographic data collected during the first and second summer cruises. Density anomaly, specific volume, dynamic height, and spiciness are computed from the processed, corrected values of pressure, temperature, and salinity. The density anomaly ( $\gamma_0$ ) at atmospheric pressure, as well as the specific volume anomaly ( $\delta$ ), was calculated from algorithms found in Volume 4 of the International Oceanographic Tables (UNESCO, 1987). Finally, spiciness ( $\pi$ ) was computed with algorithms of Pierre Flament (1986) using potential temperature.

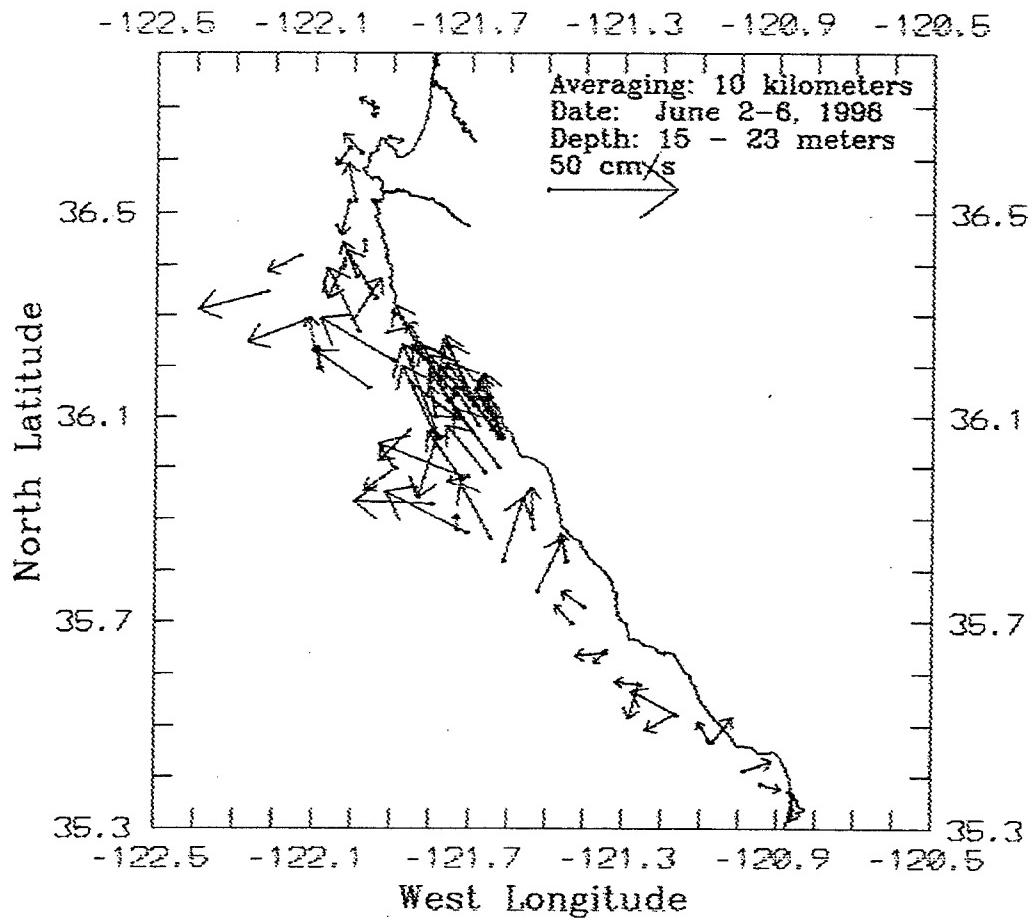
## **ACKNOWLEDGEMENTS**

Funding for this work came from a variety of sources. The Monterey Bay National Marine Sanctuary/NOAA funded ship time on the NOAA Ship *McArthur* for the CTD and ADCP work during the first cruise. Funding for the second cruise was provided by the Naval Postgraduate School (NPS) and the Oceanographer of the Navy. The authors wish to

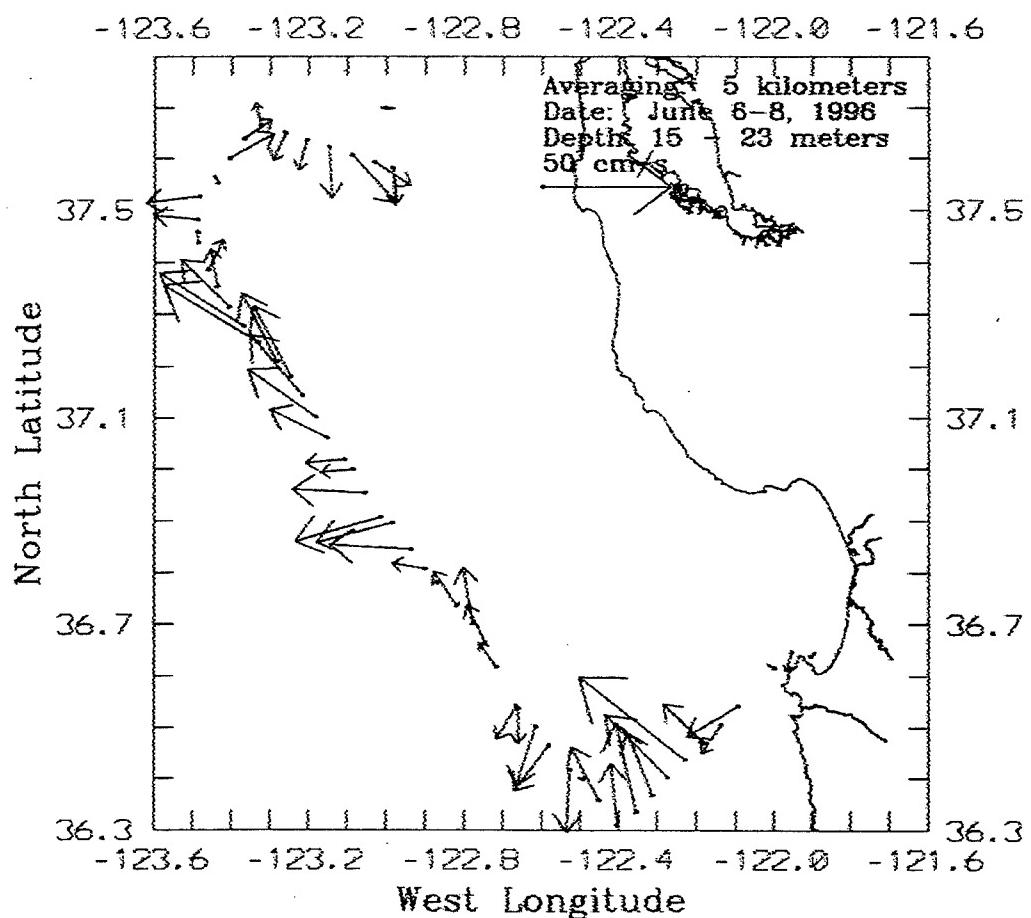
thank Ms. Noriko L. Shoji for determining the water sample salinities from leg 4 of the first cruise, as well as for her general assistance throughout all legs of the first cruise. We also wish to thank Mr. Paul Jessen for his assistance in processing some of the ADCP data from the two cruises. Finally, the able assistance of the officers and crews of the NOAA Ship *McArthur* and R/V *Point Sur* is much appreciated.



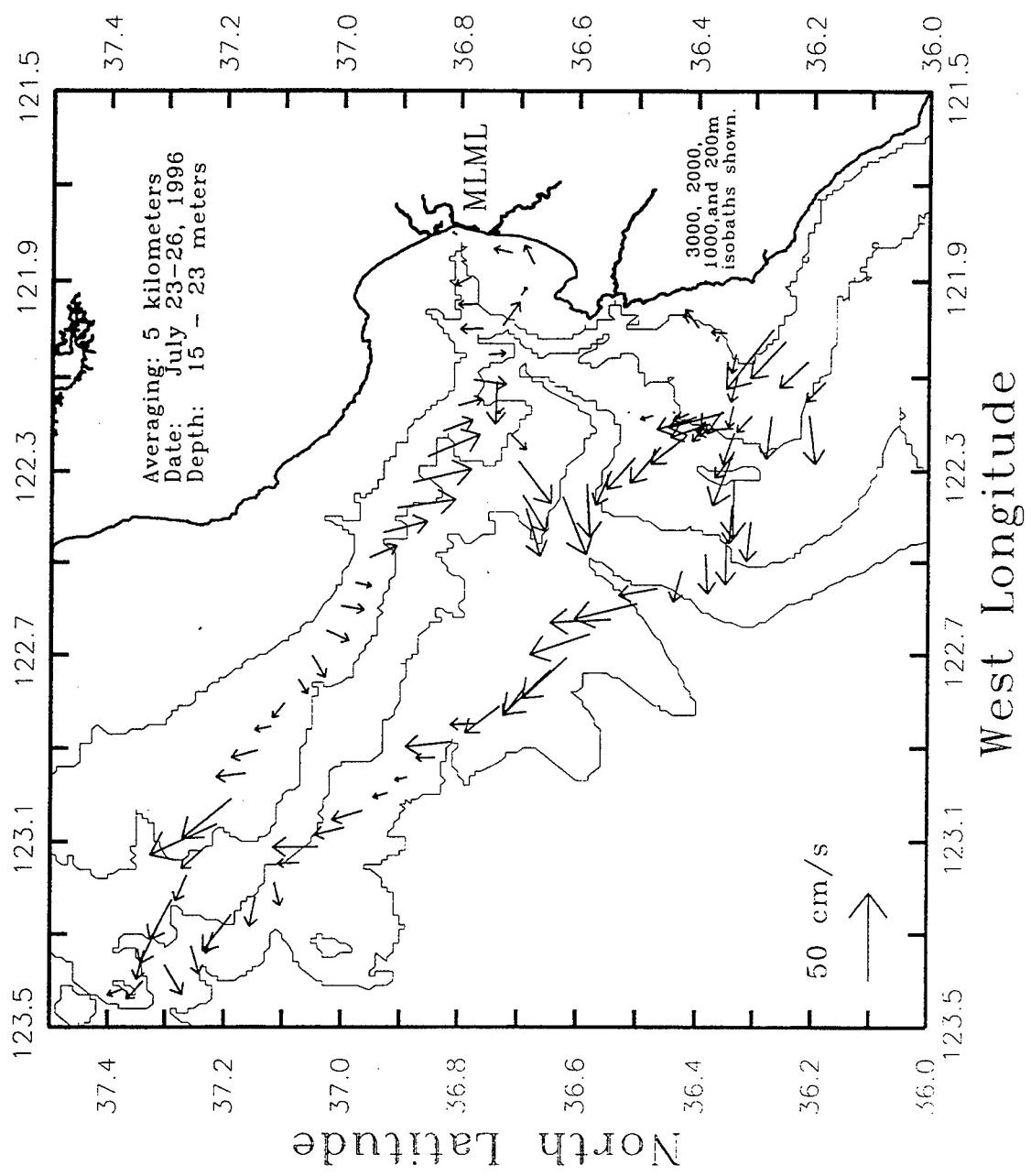
**Figure 6:** Hourly-averaged wind vectors measured at a height of 10 m from the deck of the R/V Point Sur during both legs of the 23–30 July 1996 cruise.



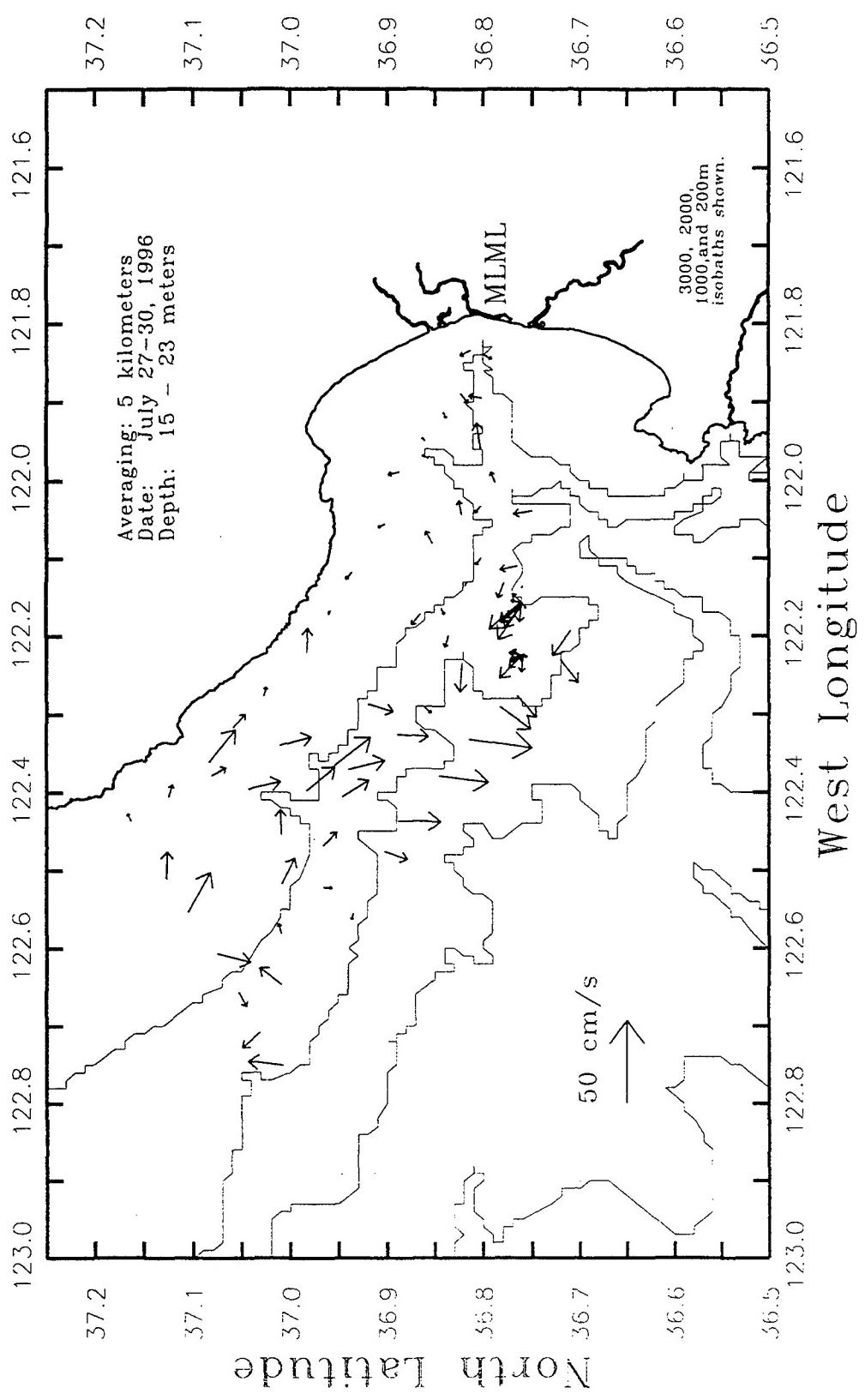
**Figure 7:** 10 km-averaged ADCP current vectors ( $\text{cm s}^{-1}$ ) from 15-23m during the occupation of the CTD stations of the 2-6 June 1996 leg 4 of the cruise aboard the NOAA Ship *McArthur*.



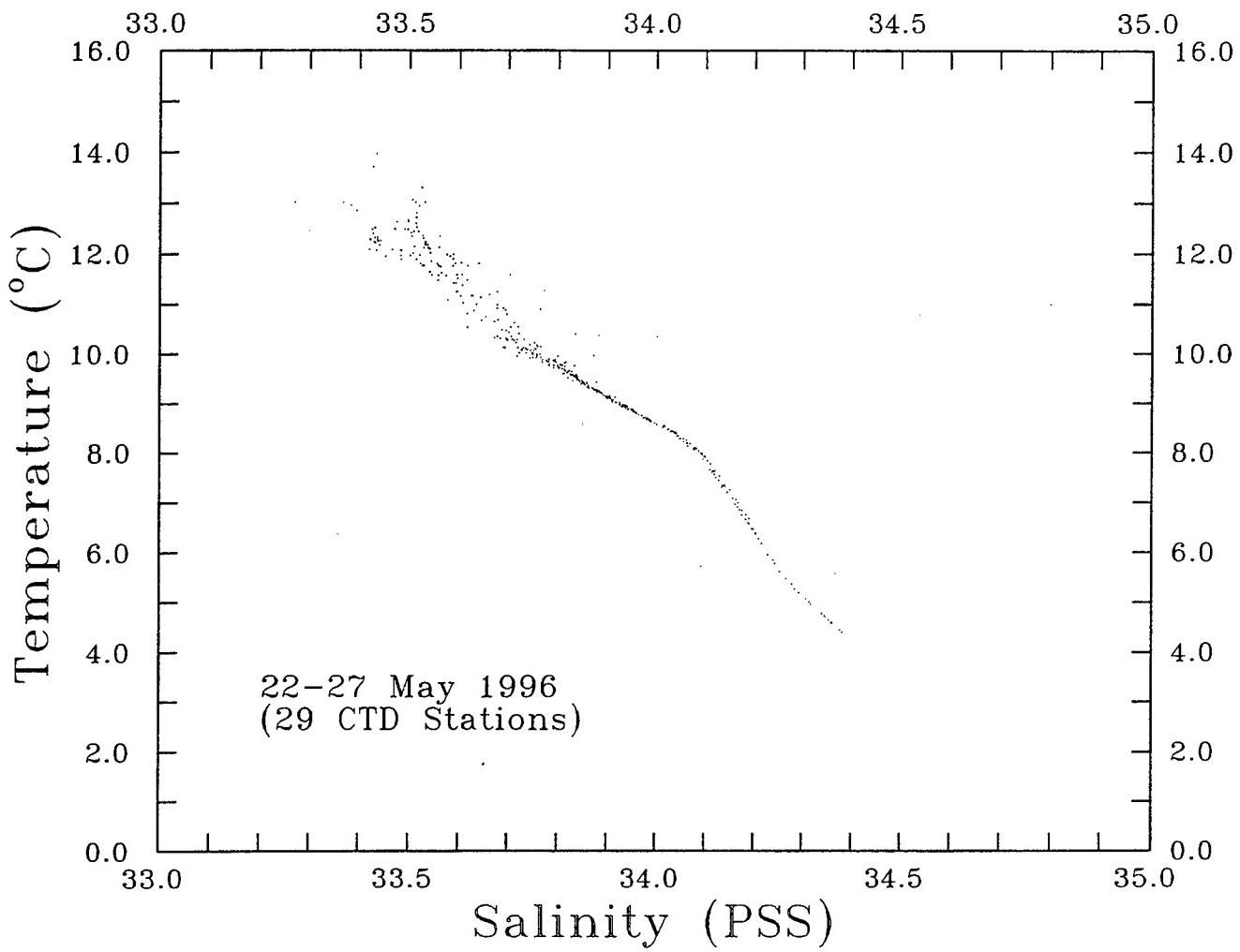
**Figure 8:** 5 km-averaged ADCP current vectors ( $\text{cm s}^{-1}$ ) from 15-23m during the occupation of the CTD stations of the 6-8 June 1996 leg 5 of the cruise aboard the NOAA Ship *McArthur*.



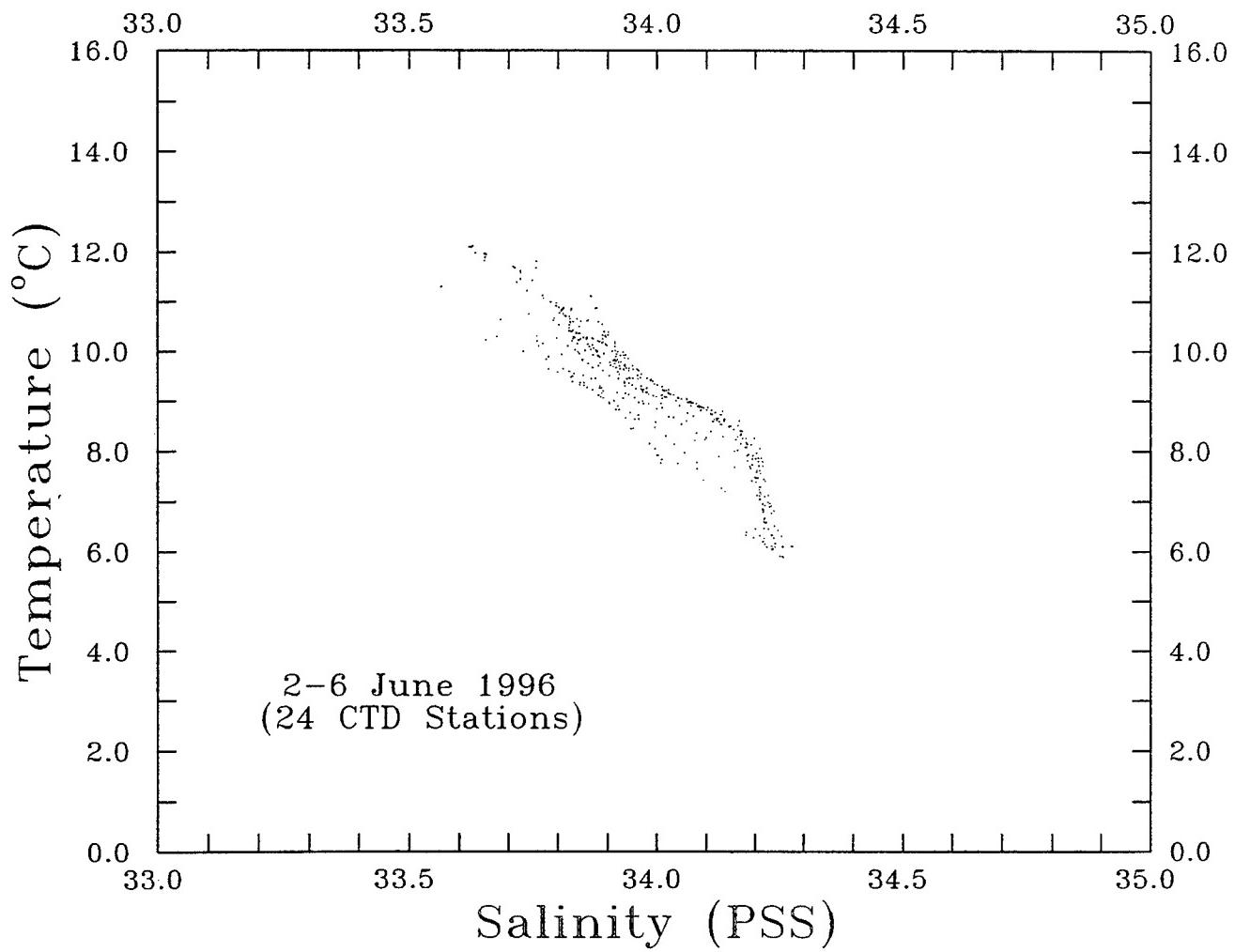
**Figure 9:** 5 km-averaged ADCP current vectors ( $\text{cm s}^{-1}$ ) from 15-23m during the occupation of the CTD stations of the 23-26 July 1996 leg 1 of the cruise aboard the R/V Point Sur.



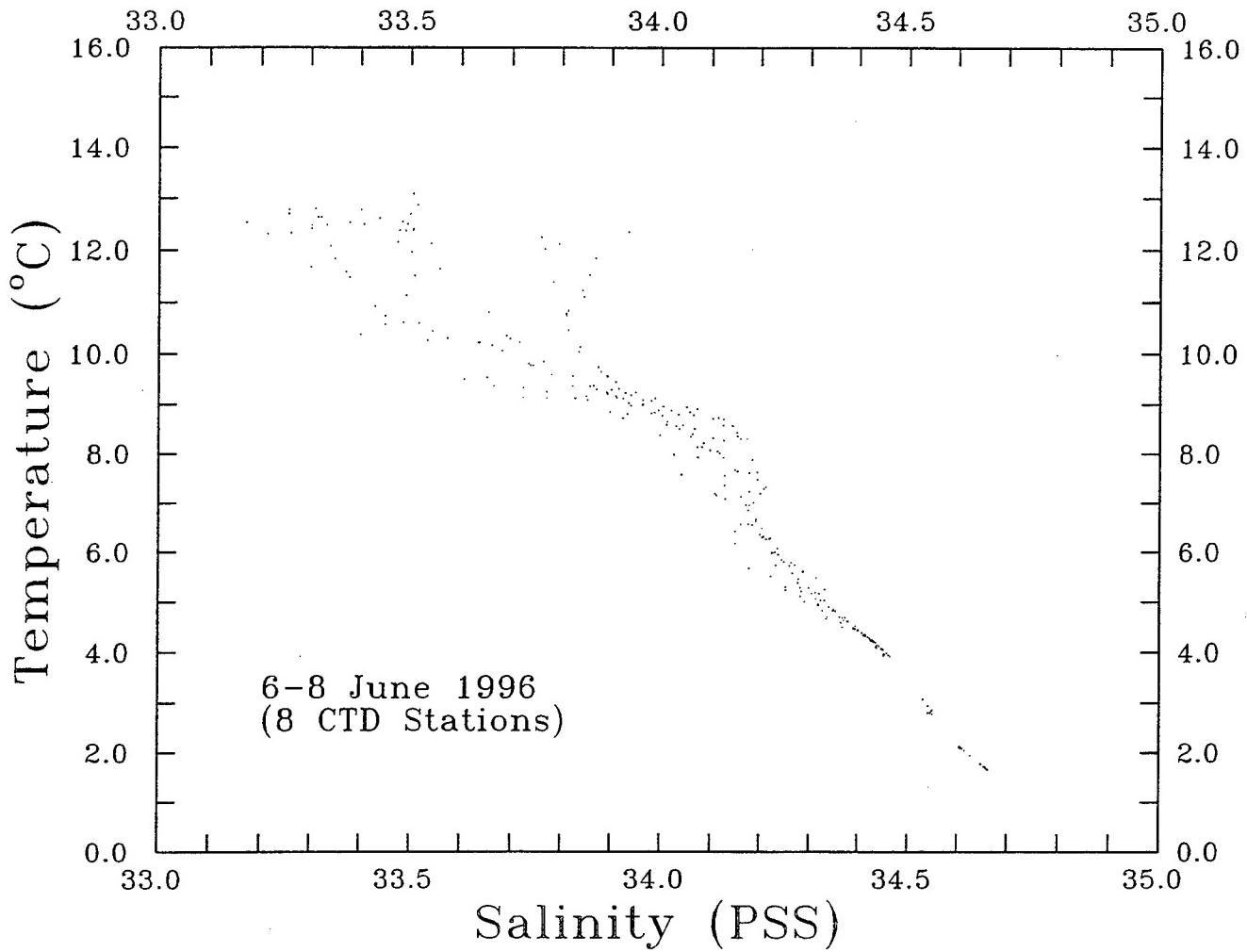
**Figure 10:** 5 km-averaged ADCP current vectors ( $\text{cm s}^{-1}$ ) from 15-23m during the occupation of the CRD stations of the 27-30 July 1996 leg 2 of the cruise aboard the R/V Point Sur.



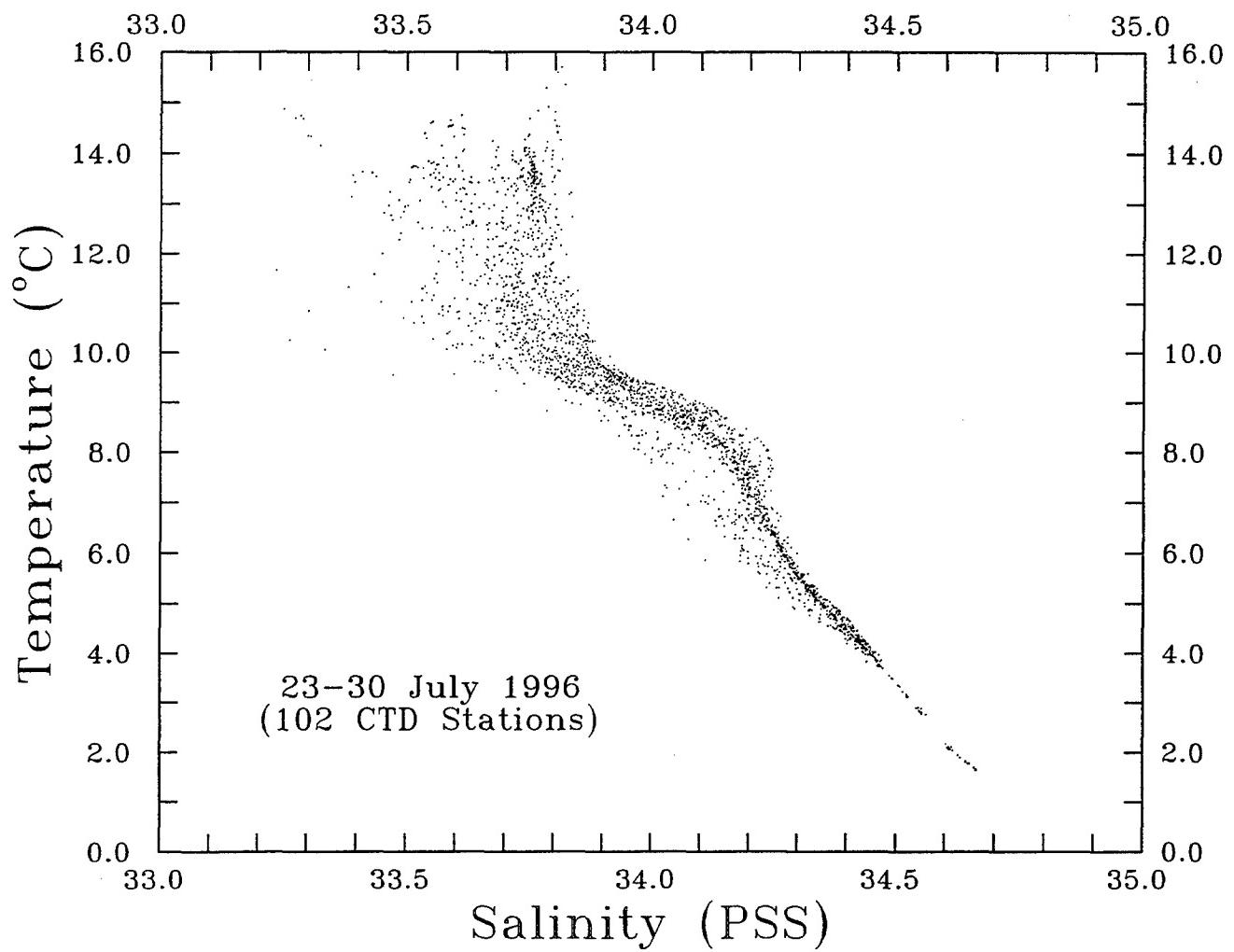
**Figure 11:** T/S diagram which includes selected data from all CTD stations completed during leg 1, 22-27 May 1996, of the cruise aboard the NOAA Ship *McArthur*. The data included in this diagram are listed in Table A1 of the Appendix.



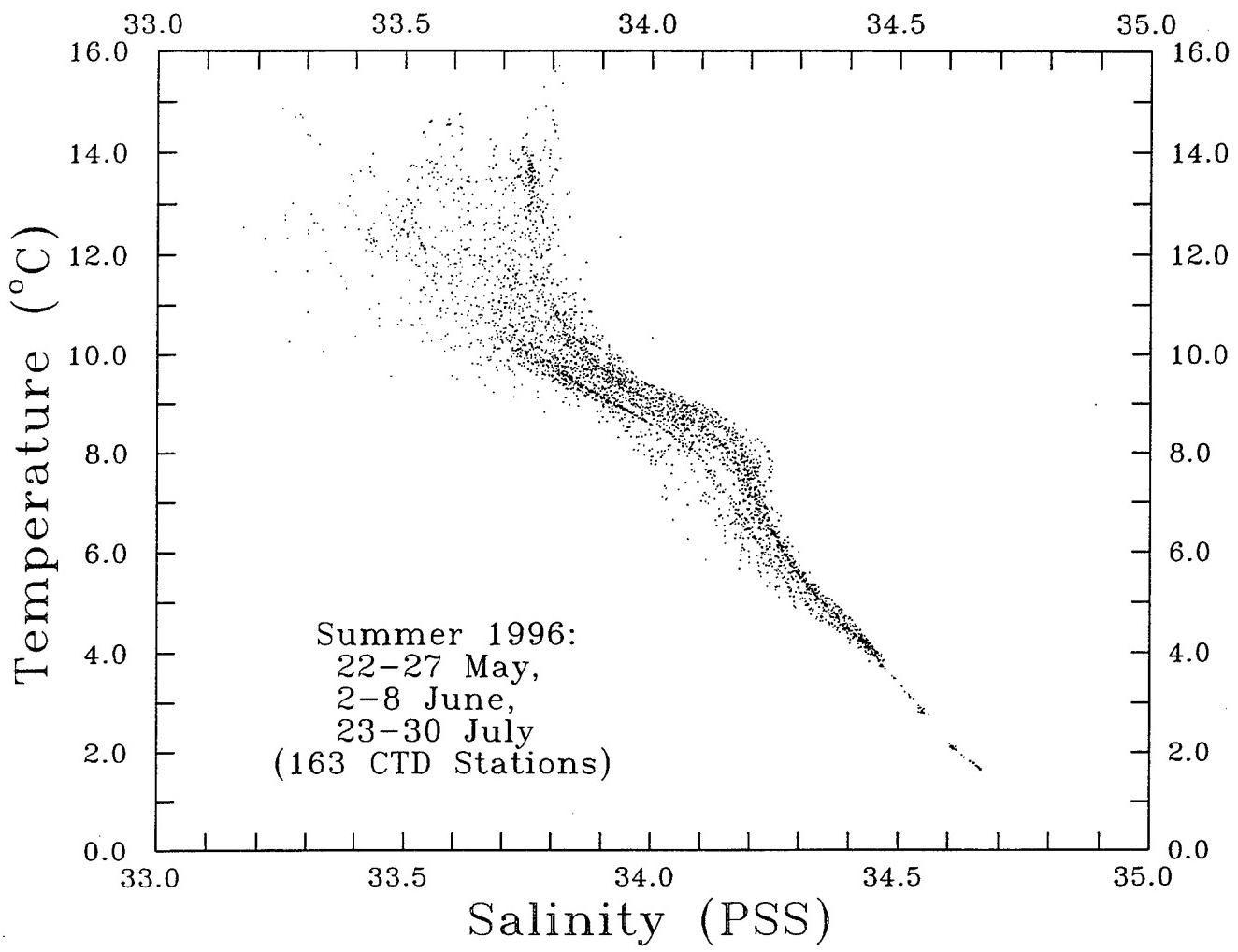
**Figure 12:** T/S diagram which includes selected data from all CTD stations completed during leg 4, 2-6 June 1996, of the cruise aboard the NOAA Ship *McArthur*. The data included in this diagram are listed in Table A2 of the Appendix.



**Figure 13:** T/S diagram which includes selected data from all CTD stations completed during leg 5, 6-8 June 1996, of the cruise aboard the NOAA Ship *McArthur*. The data included in this diagram are listed in Table A3 of the Appendix.



**Figure 14:** T/S diagram which includes selected data from all CTD stations completed during both legs of the 23-30 July 1996 cruise aboard the R/V *Point Sur*. The data included in this diagram are listed in Table A4 of the Appendix.



**Figure 15:** A composite T/S diagram which includes selected data from all CTD stations completed during all legs of the 22 May–8 June 1996 and 23–30 July 1996 cruises aboard the NOAA Ship *McArthur* and R/V *Point Sur*, respectively. The data included in this diagram are listed in the Appendix.

## APPENDIX

In the following tables, station data are listed in numerical/chronological order. The potential density anomaly ( $\gamma_0$ ) is calculated using the algorithms found in Volume 4 of the International Oceanographic Tables (UNESCO, 1987). The units for  $\gamma_0$  are  $\text{kg m}^{-3}$  and for the specific volume anomaly,  $\delta$ , are  $10^{-8} \text{ m}^3 \text{ kg}^{-1}$ . The reference pressure,  $p_r$ , for potential temperature used to calculate potential density anomaly is the sea surface ( $p_r=0$ ) (UNESCO, 1987). The summation of dynamic height ( $\Sigma\Delta D$ ) is made from the surface and the units are in dynamic meters ( $0.1 \text{ m}^2 \text{ s}^{-2}$ ). Finally, spiciness ( $\pi$ ) was computed with algorithms of Pierre Flament (1986) using potential temperature.

**Table A1.** Data listings at selected pressures of temperature ( $^{\circ}\text{C}$ ), salinity (PSS), potential density anomaly,  $\gamma_0$ , ( $\text{kg m}^{-3}$ ), specific volume anomaly,  $\delta$ , ( $10^{-8} \text{ m}^3 \text{ kg}^{-1}$ ), summation of dynamic height,  $\Sigma\Delta D$ , ( $0.1 \text{ m}^2 \text{ s}^{-2}$ ), and spiciness,  $\pi$ , for CTD stations occupied during leg 1 (22-27 May 1996) of the cruise aboard the NOAA Ship *McArthur*.

**STATION: 1**           **DATE: 23-May-1996 0607 UTC**  
**LAT: 36° 53.8 N**       **LON: 122° 0.5 W**

P(dbar)	T( $^{\circ}\text{C}$ )	S(PSS)	$\gamma_0$ ( $\text{kg m}^{-3}$ )	$\delta$	$\Sigma\Delta D$	$\pi$
2.0	13.0618	33.5058	25.224	273.52	0.005	0.5312
5.0	13.0154	33.5117	25.238	272.29	0.014	0.5263
10.0	12.9428	33.5189	25.258	270.51	0.027	0.5172
15.0	11.5868	33.6049	25.581	239.85	0.040	0.3228
20.0	10.3144	33.6949	25.880	211.51	0.051	0.1604
25.0	10.0674	33.7265	25.947	205.26	0.062	0.1426
30.0	9.8803	33.7687	26.012	199.23	0.072	0.1439

**STATION: 2**           **DATE: 23-May-1996 0637 UTC**  
**LAT: 36° 52.2 N**       **LON: 122° 0.2 W**

P(dbar)	T( $^{\circ}\text{C}$ )	S(PSS)	$\gamma_0$ ( $\text{kg m}^{-3}$ )	$\delta$	$\Sigma\Delta D$	$\pi$
2.0	12.8067	33.5135	25.280	268.16	0.005	0.4857
5.0	12.7164	33.5138	25.298	266.54	0.013	0.4678
10.0	11.3778	33.6059	25.623	235.80	0.026	0.2820
15.0	10.6840	33.6787	25.803	218.71	0.037	0.2131
20.0	10.1745	33.7576	25.953	204.59	0.048	0.1858
25.0	9.8504	33.7916	26.034	196.95	0.058	0.1571
30.0	9.7303	33.8007	26.062	194.48	0.068	0.1439
40.0	9.3859	33.8533	26.159	185.37	0.087	0.1281
44.0	9.3096	33.8617	26.178	183.65	0.094	0.1222

**STATION: 3**           **DATE: 23-May-1996 0701 UTC**  
**LAT: 36° 50.8 N**       **LON: 121° 59.8 W**

P(dbar)	T( $^{\circ}\text{C}$ )	S(PSS)	$\gamma_0$ ( $\text{kg m}^{-3}$ )	$\delta$	$\Sigma\Delta D$	$\pi$
2.0	12.4906	33.4698	25.308	265.53	0.005	0.3881
5.0	12.4861	33.4703	25.309	265.49	0.013	0.3874
10.0	12.0605	33.4836	25.401	256.89	0.026	0.3146
15.0	10.2863	33.7172	25.902	209.30	0.038	0.1734
20.0	10.1138	33.7344	25.945	205.32	0.048	0.1569
25.0	10.0207	33.7491	25.973	202.83	0.058	0.1525
30.0	9.8522	33.7772	26.023	198.15	0.068	0.1459
40.0	9.7688	33.7907	26.048	196.02	0.088	0.1423
50.0	9.7022	33.8084	26.073	193.85	0.107	0.1449
60.0	9.5800	33.8355	26.114	190.11	0.127	0.1458
70.0	9.2564	33.8821	26.203	181.80	0.145	0.1292
80.0	8.7043	33.9827	26.370	166.15	0.163	0.1203
86.0	8.6339	33.9896	26.386	164.69	0.173	0.1147

STATION: 4  
LAT: 36° 49.3 N

DATE: 23-May-1996 0744 UTC  
LON: 121° 59.1 W

P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$
2.0	12.2921	33.4201	25.307	265.57	0.005	0.3096
5.0	12.2792	33.4225	25.312	265.23	0.013	0.3089
10.0	11.1652	33.6025	25.658	232.38	0.026	0.2400
15.0	10.3483	33.7058	25.883	211.16	0.037	0.1752
20.0	10.0862	33.7382	25.953	204.59	0.048	0.1552
25.0	10.0154	33.7468	25.972	202.92	0.058	0.1497
30.0	9.7215	33.7913	26.056	195.03	0.068	0.1350
40.0	9.6221	33.8179	26.093	191.69	0.087	0.1392
50.0	9.5014	33.8361	26.127	188.64	0.106	0.1334
60.0	9.4016	33.8457	26.151	186.56	0.125	0.1243
70.0	9.3399	33.8586	26.171	184.84	0.143	0.1242
80.0	9.2565	33.8785	26.201	182.26	0.162	0.1262
90.0	9.1945	33.8886	26.219	180.74	0.180	0.1239
100.0	8.9402	33.9370	26.297	173.45	0.198	0.1211
120.0	8.6655	33.9867	26.379	165.98	0.231	0.1168
140.0	8.5151	34.0138	26.424	162.09	0.264	0.1145
160.0	8.4202	34.0298	26.451	159.85	0.296	0.1122
180.0	8.2199	34.0562	26.503	155.29	0.328	0.1023
200.0	8.1427	34.0645	26.521	153.88	0.359	0.0969
250.0	7.6556	34.1093	26.629	144.38	0.433	0.0598
300.0	7.1994	34.1442	26.721	136.18	0.503	0.0219
350.0	6.8535	34.1699	26.789	130.27	0.569	-0.0059
400.0	6.5919	34.1873	26.839	126.16	0.633	-0.0278
428.0	6.3703	34.2029	26.880	122.44	0.668	-0.0448

STATION: 5  
LAT: 36° 47.5 N

DATE: 23-May-1996 0835 UTC  
LON: 121° 58.7 W

P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$
2.0	12.3114	33.4305	25.312	265.16	0.005	0.3216
5.0	12.2637	33.4359	25.325	263.97	0.013	0.3164
10.0	10.4636	33.6953	25.855	213.72	0.025	0.1872
15.0	10.2315	33.7150	25.910	208.56	0.036	0.1621
20.0	10.1212	33.7299	25.941	205.77	0.046	0.1546
25.0	9.9901	33.7635	25.989	201.28	0.057	0.1586
30.0	9.8633	33.7903	26.031	197.36	0.067	0.1582
40.0	9.6572	33.8219	26.090	191.94	0.086	0.1483
50.0	9.5346	33.8388	26.124	188.96	0.105	0.1410
60.0	9.3770	33.8605	26.167	185.08	0.124	0.1320
70.0	9.2645	33.8746	26.196	182.49	0.142	0.1245
80.0	9.1655	33.8919	26.226	179.86	0.160	0.1220
90.0	8.8978	33.9432	26.309	172.16	0.178	0.1195
100.0	8.7524	33.9697	26.352	168.19	0.195	0.1173
120.0	8.6411	33.9872	26.384	165.58	0.228	0.1134
140.0	8.4233	34.0364	26.456	159.05	0.261	0.1183
160.0	8.3836	34.0417	26.466	158.42	0.292	0.1160
180.0	8.2329	34.0565	26.501	155.45	0.324	0.1045
200.0	8.0522	34.0777	26.545	151.59	0.355	0.0938
250.0	7.5683	34.1185	26.648	142.46	0.428	0.0545
258.0	7.4434	34.1273	26.673	140.18	0.439	0.0435

**STATION: 6**           **DATE: 23-May-1996 0910 UTC**  
**LAT: 36° 46.1 N**       **LON: 121° 58.0 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_\theta$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$
2.0	12.2395	33.4296	25.325	263.92	0.005	0.3068
5.0	12.2153	33.4311	25.331	263.44	0.013	0.3032
10.0	12.1694	33.4398	25.346	262.08	0.026	0.3010
15.0	11.2627	33.5945	25.634	234.82	0.039	0.2522
20.0	10.2950	33.6965	25.885	211.07	0.050	0.1583
25.0	10.0179	33.7360	25.963	203.76	0.060	0.1416
30.0	9.9577	33.7573	25.990	201.31	0.070	0.1481
40.0	9.7828	33.7991	26.052	195.62	0.090	0.1513
50.0	9.5927	33.8249	26.104	190.90	0.110	0.1397
60.0	9.3145	33.8679	26.183	183.57	0.128	0.1276
70.0	9.1155	33.8974	26.238	178.50	0.146	0.1184
80.0	9.0240	33.9100	26.262	176.36	0.164	0.1135
90.0	8.8796	33.9406	26.309	172.08	0.182	0.1145
100.0	8.7966	33.9603	26.338	169.55	0.199	0.1168
120.0	8.5987	33.9976	26.398	164.18	0.232	0.1150
140.0	8.4114	34.0400	26.461	158.61	0.264	0.1193
160.0	8.2847	34.0558	26.492	155.92	0.296	0.1121
180.0	8.0839	34.0827	26.544	151.34	0.326	0.1028
200.0	7.9318	34.0975	26.578	148.38	0.356	0.0916
250.0	7.5316	34.1287	26.662	141.18	0.429	0.0573
300.0	7.0856	34.1560	26.746	133.73	0.498	0.0154
350.0	6.8393	34.1752	26.796	129.68	0.564	-0.0037
400.0	6.6613	34.1829	26.826	127.42	0.628	-0.0221
450.0	6.2763	34.2099	26.898	120.97	0.690	-0.0517
500.0	5.7816	34.2442	26.988	112.65	0.748	-0.0872
550.0	5.3721	34.2794	27.066	105.46	0.802	-0.1091
600.0	5.1979	34.2939	27.098	102.79	0.854	-0.1185
650.0	4.9709	34.3180	27.144	98.75	0.905	-0.1258
700.0	4.6038	34.3588	27.218	91.78	0.952	-0.1347
750.0	4.5892	34.3602	27.221	92.00	0.998	-0.1356
800.0	4.4460	34.3761	27.249	89.58	1.044	-0.1389
802.0	4.4069	34.3811	27.258	88.76	1.045	-0.1391

**STATION: 7**           **DATE: 23-May-1996 1002 UTC**  
**LAT: 36° 44.0 N**       **LON: 121° 57.5 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_\theta$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$
2.0	12.3272	33.4358	25.313	265.05	0.005	0.3289
5.0	12.2874	33.4354	25.320	264.43	0.013	0.3207
10.0	12.2389	33.4368	25.331	263.56	0.026	0.3122
15.0	11.8891	33.4838	25.433	253.92	0.039	0.2818
20.0	11.0832	33.5769	25.653	233.09	0.052	0.2044
25.0	10.3560	33.6773	25.859	213.60	0.063	0.1537
30.0	10.1207	33.6935	25.912	208.67	0.073	0.1255
40.0	9.7443	33.7988	26.058	195.03	0.093	0.1446
50.0	9.4763	33.8408	26.135	187.90	0.113	0.1329
60.0	9.3916	33.8524	26.158	185.91	0.131	0.1279
70.0	9.0718	33.9116	26.256	176.78	0.149	0.1226
80.0	8.9555	33.9288	26.288	173.92	0.167	0.1174
90.0	8.8827	33.9422	26.310	172.01	0.184	0.1163

STATION: 8		DATE: 23-May-1996		1026 UTC		
LAT: 36° 42.5 N		LON: 121° 57.0 W				
P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$
2.0	12.4824	33.4258	25.275	268.63	0.005	0.3516
5.0	12.4030	33.4269	25.291	267.16	0.013	0.3367
10.0	12.2626	33.4419	25.330	263.62	0.027	0.3209
15.0	11.2456	33.5946	25.638	234.47	0.039	0.2485
20.0	10.8109	33.6156	25.732	225.61	0.051	0.1857
25.0	10.5405	33.6163	25.780	221.15	0.062	0.1378
30.0	10.4381	33.7011	25.864	213.29	0.073	0.1869
40.0	9.8822	33.7939	26.031	197.59	0.093	0.1640
50.0	9.2871	33.8719	26.190	182.66	0.112	0.1265
60.0	9.1450	33.8985	26.234	178.69	0.130	0.1242
70.0	9.0143	33.9180	26.270	175.43	0.148	0.1184
80.0	8.9420	33.9316	26.292	173.51	0.165	0.1175
86.0	8.8786	33.9431	26.311	171.81	0.176	0.1164

STATION: 9		DATE: 23-May-1996		1054 UTC		
LAT: 36° 40.7 N		LON: 121° 56.6 W				
P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$
2.0	12.9603	33.3829	25.149	280.66	0.006	0.4133
5.0	12.8516	33.3942	25.179	277.87	0.014	0.4002
10.0	12.5138	33.4309	25.273	269.02	0.028	0.3616
15.0	11.1432	33.6436	25.694	229.08	0.040	0.2685
20.0	10.9843	33.6772	25.749	223.99	0.051	0.2659
25.0	10.9242	33.6899	25.770	222.13	0.063	0.2650
30.0	10.8018	33.6970	25.797	219.65	0.074	0.2483
40.0	9.9495	33.7993	26.024	198.27	0.095	0.1798
50.0	9.1573	33.9035	26.236	178.32	0.113	0.1304
60.0	8.9685	33.9336	26.289	173.40	0.131	0.1236
70.0	8.9276	33.9404	26.301	172.46	0.148	0.1223
76.0	8.8620	33.9515	26.320	170.75	0.159	0.1206

STATION: 10		DATE: 23-May-1996		1138 UTC		
LAT: 36° 39.2 N		LON: 121° 56.1 W				
P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$
2.0	13.9674	33.4336	24.984	296.32	0.006	0.6625
5.0	13.7114	33.4268	25.032	291.89	0.015	0.6029
10.0	11.7573	33.5864	25.537	243.89	0.029	0.3380
15.0	11.1692	33.6282	25.678	230.67	0.041	0.2611
20.0	10.5482	33.7196	25.859	213.53	0.052	0.2212
25.0	9.7602	33.8326	26.081	192.49	0.062	0.1744
30.0	9.4287	33.8765	26.170	184.13	0.071	0.1537
40.0	8.9543	33.9397	26.296	172.36	0.089	0.1266
50.0	8.8847	33.9509	26.316	170.67	0.106	0.1242
60.0	8.8686	33.9523	26.320	170.50	0.123	0.1225
62.0	8.8687	33.9517	26.319	170.58	0.127	0.1220

**STATION: 11**           **DATE: 23-May-1996 1330 UTC**  
**LAT: 36° 54.0 N**       **LON: 122° 0.4 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$
2.0	13.3115	33.5239	25.188	276.94	0.006	0.5966
5.0	13.3038	33.5241	25.190	276.85	0.014	0.5951
10.0	13.0183	33.5297	25.251	271.14	0.028	0.5410
15.0	12.1259	33.5586	25.447	252.65	0.041	0.3867
20.0	10.8713	33.6296	25.732	225.59	0.053	0.2077
25.0	10.4836	33.6869	25.845	214.99	0.064	0.1837
28.0	10.2748	33.6981	25.890	210.79	0.070	0.1559

**STATION: 12**           **DATE: 23-May-1996 1356 UTC**  
**LAT: 36° 52.1 N**       **LON: 121° 59.9 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$
2.0	12.5985	33.5126	25.320	264.36	0.005	0.4434
5.0	12.5259	33.5148	25.336	262.94	0.013	0.4306
10.0	12.4353	33.5180	25.356	261.15	0.026	0.4151
15.0	11.5085	33.5964	25.590	239.01	0.039	0.3003
20.0	10.4081	33.7208	25.884	211.13	0.050	0.1974
25.0	10.2955	33.7315	25.912	208.59	0.060	0.1860
30.0	10.1449	33.7589	25.959	204.21	0.071	0.1815
40.0	9.8357	33.7682	26.019	198.75	0.091	0.1358
46.0	9.7655	33.7815	26.041	196.77	0.103	0.1343

**STATION: 13**           **DATE: 23-May-1996 1417 UTC**  
**LAT: 36° 50.6 N**       **LON: 121° 59.5 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$
2.0	12.6576	33.4967	25.296	266.63	0.005	0.4425
5.0	12.6359	33.4972	25.301	266.26	0.013	0.4386
10.0	12.4413	33.5083	25.347	261.98	0.027	0.4086
15.0	10.5411	33.7048	25.848	214.43	0.038	0.2086
20.0	10.0626	33.7510	25.967	203.27	0.049	0.1613
25.0	9.9869	33.7570	25.984	201.70	0.059	0.1529
30.0	9.8693	33.7761	26.019	198.51	0.069	0.1479
40.0	9.6895	33.8124	26.078	193.16	0.089	0.1461
50.0	9.5675	33.8374	26.117	189.58	0.108	0.1454
60.0	9.3215	33.8683	26.182	183.64	0.126	0.1290
70.0	9.2273	33.8831	26.209	181.28	0.145	0.1252
80.0	8.7144	33.9776	26.364	166.68	0.162	0.1179

**STATION: 14**           **DATE: 23-May-1996**   **1453 UTC**  
**LAT: 36° 49.1 N**       **LON: 121° 58.9 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$
2.0	12.4842	33.4960	25.329	263.48	0.005	0.4075
5.0	12.4700	33.4969	25.333	263.23	0.013	0.4054
10.0	12.4132	33.5029	25.349	261.86	0.026	0.3988
15.0	12.0174	33.5406	25.453	252.04	0.039	0.3515
20.0	10.2719	33.7117	25.901	209.57	0.051	0.1663
25.0	10.0956	33.7267	25.942	205.70	0.061	0.1475
30.0	9.9236	33.7494	25.989	201.35	0.071	0.1360
40.0	9.7960	33.7824	26.037	197.07	0.091	0.1403
50.0	9.5859	33.8289	26.108	190.50	0.111	0.1417
60.0	9.4093	33.8513	26.154	186.27	0.129	0.1300
70.0	8.9820	33.9314	26.286	173.95	0.148	0.1239
80.0	8.7538	33.9709	26.353	167.76	0.165	0.1188
90.0	8.6740	33.9822	26.374	165.91	0.181	0.1150
100.0	8.4649	34.0244	26.439	159.86	0.198	0.1158
120.0	8.2832	34.0478	26.486	155.81	0.229	0.1062
140.0	8.1313	34.0639	26.521	152.75	0.260	0.0956
160.0	8.0809	34.0760	26.539	151.46	0.290	0.0974
180.0	7.8689	34.0958	26.586	147.28	0.320	0.0812
200.0	7.6425	34.1154	26.634	142.94	0.349	0.0634
238.0	7.3409	34.1351	26.693	137.86	0.402	0.0354

**STATION: 15**           **DATE: 23-May-1996**   **1523 UTC**  
**LAT: 36° 47.3 N**       **LON: 121° 58.5 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$
2.0	12.2070	33.5310	25.410	255.85	0.005	0.3809
5.0	12.1736	33.5344	25.419	255.07	0.013	0.3769
10.0	12.0964	33.5398	25.438	253.39	0.025	0.3661
15.0	11.7439	33.5620	25.521	245.57	0.038	0.3161
20.0	10.9986	33.6352	25.714	227.34	0.050	0.2352
25.0	10.2940	33.7075	25.894	210.35	0.061	0.1667
30.0	10.1255	33.7303	25.940	206.02	0.071	0.1555
40.0	9.8305	33.7958	26.041	196.62	0.091	0.1568
50.0	9.6644	33.8219	26.089	192.25	0.111	0.1493
60.0	9.4722	33.8371	26.133	188.30	0.130	0.1291
70.0	9.2086	33.8883	26.216	180.61	0.148	0.1263
80.0	9.0343	33.9161	26.266	176.06	0.166	0.1200
90.0	8.9268	33.9372	26.299	173.05	0.183	0.1193
100.0	8.6703	33.9878	26.379	165.62	0.200	0.1187
120.0	8.4046	34.0387	26.460	158.26	0.232	0.1175
140.0	8.2018	34.0640	26.511	153.76	0.264	0.1063
160.0	8.0366	34.0868	26.554	150.02	0.294	0.0993
180.0	7.7765	34.1108	26.611	144.85	0.323	0.0795
200.0	7.6058	34.1133	26.638	142.58	0.352	0.0565
250.0	7.3197	34.1400	26.700	137.39	0.421	0.0361
300.0	6.9682	34.1604	26.766	131.80	0.489	0.0028
330.0	6.7475	34.1750	26.807	128.17	0.528	-0.0159

**STATION: 16**           **DATE: 23-May-1996**    **1555 UTC**  
**LAT: 36° 46.2 N**       **LON: 121° 58.1 W**

P (dbar)	T (°C)	S (PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$
2.0	12.1794	33.5362	25.419	254.96	0.005	0.3796
5.0	12.1113	33.5368	25.432	253.76	0.013	0.3668
10.0	11.8039	33.5552	25.505	247.02	0.025	0.3221
15.0	11.4211	33.5932	25.605	237.61	0.037	0.2800
20.0	10.6525	33.6711	25.803	218.85	0.049	0.2013
25.0	10.1320	33.7190	25.930	206.86	0.059	0.1479
30.0	9.9294	33.7649	26.000	200.30	0.070	0.1493
40.0	9.7717	33.8063	26.059	194.91	0.089	0.1551
50.0	9.5877	33.8358	26.113	190.01	0.108	0.1475
60.0	9.4282	33.8572	26.156	186.12	0.127	0.1378
70.0	9.2238	33.8857	26.211	181.03	0.146	0.1267
80.0	8.9408	33.9351	26.295	173.23	0.164	0.1201
90.0	8.6303	33.9903	26.387	164.66	0.180	0.1146
100.0	8.5378	34.0171	26.423	161.48	0.197	0.1213
120.0	8.3913	34.0389	26.462	158.05	0.229	0.1156
140.0	8.2541	34.0625	26.502	154.63	0.260	0.1131
160.0	8.1094	34.0780	26.536	151.72	0.290	0.1032
180.0	7.9139	34.1004	26.583	147.58	0.321	0.0915
200.0	7.7746	34.1104	26.611	145.18	0.350	0.0787
250.0	7.3606	34.1394	26.694	138.00	0.421	0.0414
300.0	7.0605	34.1629	26.755	132.88	0.489	0.0174
350.0	6.7534	34.1838	26.814	127.89	0.554	-0.0084
400.0	6.3952	34.2046	26.878	122.26	0.616	-0.0399
450.0	5.9557	34.2296	26.955	115.34	0.676	-0.0767
500.0	5.6171	34.2544	27.016	109.80	0.732	-0.0991
550.0	5.4772	34.2673	27.044	107.67	0.786	-0.1062
600.0	5.2652	34.2851	27.084	104.27	0.839	-0.1176
650.0	5.0732	34.3074	27.124	100.79	0.890	-0.1226
700.0	4.7348	34.3446	27.192	94.42	0.940	-0.1316
734.0	4.6510	34.3534	27.209	93.09	0.971	-0.1341

**STATION: 17**           **DATE: 23-May-1996**    **1644 UTC**  
**LAT: 36° 43.8 N**       **LON: 121° 57.6 W**

P (dbar)	T (°C)	S (PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$
2.0	12.3568	33.5260	25.377	258.94	0.005	0.4062
5.0	12.3050	33.5275	25.388	257.95	0.013	0.3971
10.0	12.2314	33.5318	25.406	256.42	0.026	0.3860
15.0	12.1361	33.5368	25.428	254.44	0.039	0.3713
20.0	11.7582	33.5619	25.519	245.94	0.051	0.3185
25.0	10.6795	33.6455	25.778	221.32	0.063	0.1860
30.0	10.3148	33.6833	25.871	212.58	0.074	0.1511
40.0	9.9556	33.7174	25.959	204.43	0.094	0.1159
50.0	9.8788	33.7816	26.022	198.64	0.114	0.1535
60.0	9.5318	33.8364	26.123	189.28	0.134	0.1385
70.0	9.3788	33.8542	26.162	185.77	0.153	0.1271
80.0	8.8632	33.9506	26.320	170.91	0.170	0.1200
90.0	8.7520	33.9696	26.352	168.01	0.187	0.1173
100.0	8.6343	33.9903	26.387	164.90	0.204	0.1151
102.0	8.5721	34.0012	26.405	163.20	0.207	0.1140

**STATION: 18**           **DATE: 23-May-1996**   **1730 UTC**  
**LAT: 36° 42.6 N**       **LON: 121° 57.3 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$
2.0	12.1393	33.5095	25.406	256.21	0.005	0.3507
5.0	12.1214	33.5281	25.424	254.58	0.013	0.3618
10.0	12.1690	33.5305	25.417	255.38	0.026	0.3729
15.0	11.7629	33.5568	25.514	246.29	0.038	0.3155
20.0	11.0254	33.6075	25.688	229.84	0.050	0.2181
25.0	10.3256	33.6721	25.861	213.49	0.061	0.1442
30.0	10.1317	33.6899	25.908	209.11	0.072	0.1245
40.0	10.0171	33.7219	25.952	205.09	0.092	0.1300
50.0	9.7749	33.7925	26.048	196.18	0.112	0.1446
60.0	9.4106	33.8509	26.154	186.32	0.132	0.1299
70.0	9.1497	33.8984	26.233	178.95	0.150	0.1247
80.0	8.9545	33.9326	26.291	173.63	0.167	0.1203
90.0	8.8509	33.9513	26.322	170.86	0.185	0.1184
96.0	8.8164	33.9571	26.332	170.01	0.195	0.1175

**STATION: 19**           **DATE: 23-May-1996**   **1806 UTC**  
**LAT: 36° 40.8 N**       **LON: 121° 57.0 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$
2.0	11.8080	33.5217	25.478	249.38	0.005	0.2966
5.0	11.7701	33.5257	25.488	248.48	0.012	0.2925
10.0	11.6441	33.5397	25.522	245.34	0.025	0.2795
15.0	11.4785	33.5567	25.566	241.30	0.037	0.2617
20.0	11.1708	33.6243	25.675	231.08	0.049	0.2581
25.0	10.9244	33.6766	25.759	223.12	0.060	0.2544
30.0	10.6267	33.7117	25.839	215.63	0.071	0.2287
40.0	10.1403	33.7650	25.965	203.89	0.092	0.1854
50.0	9.8658	33.7935	26.034	197.55	0.112	0.1607
60.0	9.5085	33.8387	26.128	188.75	0.132	0.1364
70.0	9.1223	33.9043	26.242	178.10	0.150	0.1250
80.0	8.9553	33.9372	26.295	173.30	0.168	0.1241
88.0	8.8611	33.9518	26.321	170.94	0.181	0.1205

**STATION: 20**           **DATE: 23-May-1996**   **2113 UTC**  
**LAT: 36° 54.0 N**       **LON: 122° 0.5 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$
2.0	12.3392	33.5601	25.407	256.10	0.005	0.4297
5.0	11.9007	33.5869	25.511	246.32	0.013	0.3662
10.0	10.0720	33.7445	25.960	203.70	0.024	0.1579
15.0	9.9239	33.7565	25.994	200.54	0.034	0.1419
20.0	9.8361	33.7806	26.028	197.45	0.044	0.1460
25.0	9.6465	33.8204	26.091	191.60	0.054	0.1455
30.0	9.5500	33.8327	26.116	189.27	0.063	0.1391
32.0	9.5325	33.8327	26.119	189.03	0.067	0.1361

**STATION: 21**           **DATE: 23-May-1996 2140 UTC**  
**LAT: 36° 52.3 N**       **LON: 122° 0.1 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$
2.0	11.9846	33.5746	25.486	248.62	0.005	0.3723
5.0	11.9894	33.5871	25.494	247.86	0.012	0.3831
10.0	11.8211	33.6035	25.539	243.76	0.025	0.3637
15.0	10.8835	33.6940	25.779	221.02	0.037	0.2621
20.0	9.8092	33.8125	26.057	194.65	0.047	0.1668
25.0	9.7460	33.8132	26.069	193.69	0.056	0.1566
30.0	9.6458	33.8272	26.096	191.18	0.066	0.1507
40.0	9.4607	33.8471	26.142	187.00	0.085	0.1355
42.0	9.4376	33.8499	26.148	186.47	0.089	0.1339

**STATION: 22**           **DATE: 23-May-1996 2203 UTC**  
**LAT: 36° 50.6 N**       **LON: 121° 59.6 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$
2.0	11.9748	33.5204	25.445	252.45	0.005	0.3275
5.0	11.9545	33.5810	25.496	247.68	0.013	0.3715
10.0	11.8071	33.6401	25.570	240.81	0.025	0.3900
15.0	10.3696	33.8818	26.016	198.50	0.036	0.3183
20.0	9.7098	33.8028	26.066	193.80	0.045	0.1423
25.0	9.6244	33.8183	26.093	191.40	0.055	0.1402
30.0	9.5610	33.8299	26.112	189.65	0.065	0.1387
40.0	9.4267	33.8492	26.150	186.31	0.083	0.1316
50.0	9.3655	33.8613	26.169	184.66	0.102	0.1309
60.0	9.2758	33.8770	26.196	182.29	0.120	0.1285
70.0	9.1268	33.9015	26.239	178.37	0.138	0.1235
76.0	9.0002	33.9248	26.278	174.82	0.149	0.1215

STATION: 23		DATE: 23-May-1996		2230 UTC		
LAT: 36° 49.8 N		LON: 121° 59.1 W				
P(dbar)	T(°C)	S(PSS)	$\gamma_e$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$
4.0	11.8097	33.5911	25.531	244.33	0.010	0.3518
5.0	11.7571	33.6161	25.561	241.57	0.012	0.3616
10.0	11.2698	33.7718	25.771	221.66	0.024	0.3933
15.0	10.0970	33.7544	25.963	203.48	0.034	0.1702
20.0	9.7148	33.8010	26.064	194.01	0.044	0.1417
25.0	9.6023	33.8109	26.091	191.61	0.054	0.1306
30.0	9.5151	33.8196	26.112	189.69	0.063	0.1229
40.0	9.4598	33.8294	26.129	188.30	0.082	0.1213
50.0	9.3326	33.8591	26.173	184.31	0.101	0.1238
60.0	9.2235	33.8780	26.205	181.41	0.119	0.1207
70.0	9.1243	33.8986	26.237	178.55	0.137	0.1208
80.0	8.8749	33.9485	26.316	171.24	0.155	0.1202
90.0	8.6755	33.9856	26.377	165.68	0.172	0.1180
100.0	8.5232	34.0178	26.425	161.21	0.188	0.1196
120.0	8.4788	34.0256	26.439	160.32	0.220	0.1186
140.0	8.2810	34.0494	26.488	156.00	0.252	0.1068
160.0	8.1829	34.0694	26.518	153.43	0.283	0.1075
180.0	7.9604	34.0938	26.571	148.74	0.313	0.0932
200.0	7.8347	34.1047	26.598	146.46	0.342	0.0830
250.0	7.6161	34.1171	26.640	143.24	0.415	0.0602
300.0	7.2110	34.1443	26.720	136.33	0.485	0.0236
350.0	6.9077	34.1660	26.779	131.30	0.552	-0.0017
400.0	6.5664	34.1903	26.844	125.60	0.617	-0.0288
406.0	6.4661	34.1983	26.864	123.75	0.624	-0.0357

STATION: 24		DATE: 23-May-1996		2310 UTC		
LAT: 36° 47.8 N		LON: 121° 58.7 W				
P(dbar)	T(°C)	S(PSS)	$\gamma_e$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$
2.0	11.6244	33.5640	25.545	243.02	0.005	0.2952
5.0	11.5850	33.5942	25.575	240.16	0.012	0.3117
10.0	11.4795	33.6150	25.611	236.89	0.024	0.3082
15.0	10.8991	33.7646	25.832	216.01	0.035	0.3202
20.0	9.9622	33.8713	26.078	192.73	0.045	0.2393
25.0	9.7802	33.8041	26.056	194.91	0.055	0.1552
30.0	9.6556	33.8141	26.084	192.30	0.065	0.1420
40.0	9.5527	33.8359	26.119	189.26	0.084	0.1419
50.0	9.4679	33.8472	26.141	187.29	0.103	0.1366
60.0	9.3096	33.8693	26.185	183.39	0.121	0.1279
70.0	9.1500	33.8958	26.231	179.15	0.139	0.1227
80.0	9.0749	33.9089	26.254	177.22	0.157	0.1208
90.0	8.9445	33.9354	26.295	173.45	0.175	0.1207
100.0	8.7052	33.9821	26.369	166.56	0.192	0.1197
120.0	8.4202	34.0370	26.457	158.61	0.224	0.1186
140.0	8.3471	34.0462	26.475	157.21	0.256	0.1143
160.0	8.1893	34.0624	26.512	154.04	0.287	0.1029
180.0	7.9819	34.0933	26.567	149.08	0.317	0.0960
200.0	7.8400	34.1039	26.597	146.59	0.347	0.0831
250.0	7.4998	34.1213	26.660	141.29	0.418	0.0469
282.0	7.3026	34.1336	26.698	138.12	0.463	0.0282

**STATION: 25**           **DATE: 23-May-1996**   **2348 UTC**  
**LAT: 36° 46.0 N**       **LON: 121° 58.2 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$
2.0	11.5819	33.5444	25.537	243.72	0.005	0.2717
5.0	11.5759	33.5570	25.548	242.75	0.012	0.2805
10.0	11.5647	33.5730	25.563	241.49	0.024	0.2909
15.0	11.4237	33.5883	25.601	238.01	0.036	0.2766
20.0	10.4664	33.6951	25.854	213.99	0.048	0.1873
25.0	9.9183	33.7435	25.985	201.60	0.058	0.1306
30.0	9.7675	33.8086	26.062	194.48	0.068	0.1564
40.0	9.6578	33.8229	26.091	191.88	0.087	0.1491
50.0	9.4063	33.8578	26.160	185.55	0.106	0.1348
60.0	9.2872	33.8727	26.191	182.79	0.125	0.1269
70.0	8.9665	33.9249	26.283	174.20	0.142	0.1163
80.0	8.8276	33.9569	26.330	169.91	0.160	0.1193
90.0	8.6785	33.9795	26.371	166.18	0.177	0.1136
100.0	8.5584	34.0157	26.418	161.88	0.193	0.1234
120.0	8.4396	34.0327	26.450	159.22	0.225	0.1182
140.0	8.3381	34.0431	26.474	157.30	0.257	0.1105
160.0	8.1886	34.0625	26.512	154.02	0.288	0.1029
180.0	8.0856	34.0800	26.542	151.57	0.318	0.1009
200.0	7.9976	34.0910	26.564	149.81	0.348	0.0962
250.0	7.6432	34.1201	26.639	143.40	0.422	0.0665
300.0	7.2527	34.1498	26.718	136.50	0.492	0.0338
350.0	6.9945	34.1670	26.768	132.41	0.559	0.0109
400.0	6.6776	34.1895	26.829	127.15	0.624	-0.0147
450.0	6.4691	34.1953	26.862	124.61	0.687	-0.0382
500.0	6.1841	34.2160	26.916	119.96	0.748	-0.0592
550.0	5.8531	34.2402	26.977	114.48	0.807	-0.0821
600.0	5.3656	34.2798	27.068	105.92	0.862	-0.1101
650.0	5.0094	34.3142	27.137	99.50	0.913	-0.1245
700.0	4.7767	34.3396	27.183	95.30	0.962	-0.1309
732.0	4.7044	34.3470	27.198	94.19	0.992	-0.1333

**STATION: 26**           **DATE: 24-May-1996**   **0049 UTC**  
**LAT: 36° 44.1 N**       **LON: 121° 57.6 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$
2.0	11.8862	33.5138	25.457	251.36	0.005	0.3052
5.0	11.8873	33.5140	25.457	251.43	0.013	0.3055
10.0	11.8924	33.5138	25.456	251.65	0.025	0.3062
15.0	11.7719	33.5286	25.490	248.53	0.038	0.2949
20.0	10.7458	33.6537	25.773	221.70	0.049	0.2042
25.0	9.9838	33.7489	25.979	202.25	0.060	0.1460
30.0	9.8940	33.7817	26.019	198.48	0.070	0.1566
40.0	9.5956	33.8249	26.103	190.75	0.089	0.1403
50.0	9.4284	33.8510	26.151	186.40	0.108	0.1331
60.0	9.0554	33.9085	26.256	176.58	0.126	0.1177
70.0	8.9350	33.9293	26.291	173.39	0.144	0.1147
80.0	8.8359	33.9538	26.326	170.26	0.161	0.1182
90.0	8.7046	33.9734	26.362	167.02	0.178	0.1129
94.0	8.6373	33.9895	26.386	164.89	0.185	0.1150

**STATION: 27**  
**LAT: 36° 42.6 N**

**DATE: 24-May-1996 0117 UTC**  
**LON: 121° 57.2 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_\theta$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$
2.0	11.9471	33.4530	25.398	256.93	0.005	0.2687
5.0	11.9625	33.4830	25.419	255.06	0.013	0.2954
10.0	11.9646	33.5010	25.432	253.88	0.026	0.3099
15.0	11.8517	33.5430	25.486	248.88	0.038	0.3215
20.0	11.2470	33.6772	25.702	228.48	0.050	0.3140
25.0	10.3987	33.8342	25.974	202.69	0.061	0.2854
30.0	10.1796	33.7434	25.941	205.92	0.071	0.1752
40.0	9.5682	33.8263	26.108	190.22	0.091	0.1369
50.0	9.4428	33.8431	26.142	187.21	0.110	0.1292
60.0	9.3156	33.8690	26.183	183.50	0.128	0.1286
70.0	9.0935	33.8996	26.243	178.00	0.147	0.1166
80.0	8.9066	33.9366	26.302	172.61	0.164	0.1158
90.0	8.7685	33.9643	26.345	168.65	0.181	0.1157

**STATION: 28**  
**LAT: 36° 40.8 N**

**DATE: 24-May-1996 0144 UTC**  
**LON: 121° 56.7 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_\theta$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$
2.0	12.0859	33.4195	25.346	261.89	0.005	0.2689
5.0	12.0659	33.4333	25.361	260.59	0.013	0.2759
10.0	12.0802	33.4651	25.383	258.61	0.026	0.3038
15.0	12.0751	33.4823	25.397	257.36	0.039	0.3163
20.0	12.0148	33.5069	25.428	254.58	0.052	0.3240
25.0	11.5883	33.7026	25.659	232.68	0.064	0.3977
30.0	11.1917	33.6613	25.700	228.93	0.076	0.2910
40.0	10.2211	33.7528	25.942	206.10	0.097	0.1897
50.0	9.5401	33.8347	26.120	189.35	0.117	0.1387
60.0	9.0990	33.9050	26.246	177.50	0.135	0.1219
70.0	8.9831	33.9250	26.281	174.44	0.153	0.1190
78.0	8.8284	33.9543	26.328	170.08	0.166	0.1175

**STATION: 29**  
**LAT: 36° 39.1 N**

**DATE: 24-May-1996 0221 UTC**  
**LON: 121° 56.1 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_\theta$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$
2.0	13.0178	33.2694	25.050	290.11	0.006	0.3349
5.0	13.0110	33.3667	25.126	282.88	0.014	0.4107
10.0	12.6268	33.4743	25.285	267.90	0.028	0.4185
15.0	12.4871	33.4904	25.325	264.25	0.041	0.4034
20.0	12.3460	33.5045	25.363	260.75	0.055	0.3866
25.0	10.3460	34.0016	26.113	189.47	0.066	0.4089
30.0	9.8344	33.8158	26.056	195.01	0.076	0.1735
40.0	9.1259	33.9152	26.250	176.78	0.094	0.1347
50.0	9.0321	33.9252	26.273	174.80	0.111	0.1273
58.0	8.9665	33.9359	26.292	173.16	0.125	0.1252

**Table A2.** Data listings at selected pressures of temperature ( $^{\circ}\text{C}$ ), salinity (PSS), potential density anomaly,  $\gamma_0$ , ( $\text{kg m}^{-3}$ ), specific volume anomaly,  $\delta$ , ( $10^{-8} \text{ m}^3 \text{ kg}^{-1}$ ), summation of dynamic height,  $\Sigma\Delta D$ , ( $0.1 \text{ m}^2 \text{ s}^{-2}$ ), and spiciness,  $\pi$ , for CTD stations occupied during leg 4 (2-6 June 1996) of the cruise aboard the NOAA Ship *McArthur*.

**STATION: 30**                   **DATE: 3-June-1996 2115 UTC**  
**LAT: 36° 1.0 N**               **LON: 121° 35.8 W**

P(dbar)	T( $^{\circ}\text{C}$ )	S(PSS)	$\gamma_0$ ( $\text{kg m}^{-3}$ )	$\delta$	$\Sigma\Delta D$	$\pi$
1.0	10.6559	33.8232	25.921	207.25	0.002	0.3228
5.0	10.6017	33.8234	25.930	206.42	0.010	0.3131
10.0	10.5310	33.8223	25.942	205.43	0.021	0.2996
15.0	10.4745	33.8218	25.951	204.63	0.031	0.2892
20.0	10.2505	33.8289	25.996	200.54	0.041	0.2555
25.0	10.2467	33.8297	25.997	200.52	0.051	0.2554
30.0	10.2196	33.8420	26.011	199.27	0.061	0.2603
40.0	10.1950	33.8834	26.048	196.00	0.081	0.2886
45.0	10.1865	33.8902	26.055	195.47	0.091	0.2923

**STATION: 31**                   **DATE: 3-June-1996 2141 UTC**  
**LAT: 36° 0.3 N**               **LON: 121° 36.7 W**

P(dbar)	T( $^{\circ}\text{C}$ )	S(PSS)	$\gamma_0$ ( $\text{kg m}^{-3}$ )	$\delta$	$\Sigma\Delta D$	$\pi$
1.0	10.6052	33.8452	25.947	204.78	0.002	0.3311
5.0	10.3544	33.8439	25.989	200.82	0.010	0.2858
10.0	10.2768	33.8503	26.008	199.18	0.020	0.2772
15.0	10.0301	33.8331	26.036	196.56	0.030	0.2208
20.0	9.9874	33.8392	26.048	195.52	0.040	0.2182
25.0	9.8379	33.8487	26.081	192.53	0.050	0.2002
30.0	9.8168	33.8484	26.084	192.31	0.059	0.1963
40.0	9.7098	33.8814	26.128	188.36	0.078	0.2042
50.0	9.7229	33.9052	26.145	187.00	0.097	0.2251
60.0	9.6521	33.9245	26.172	184.64	0.116	0.2283
70.0	9.4623	33.9427	26.217	180.51	0.134	0.2109
80.0	9.4665	33.9660	26.235	179.03	0.152	0.2299
90.0	9.4304	33.9877	26.258	177.05	0.170	0.2409
100.0	9.3391	33.9948	26.279	175.29	0.187	0.2313
120.0	9.2043	34.0191	26.320	171.78	0.222	0.2282
140.0	9.1209	34.0341	26.345	169.75	0.256	0.2262
160.0	8.9544	34.0707	26.401	164.85	0.290	0.2281
180.0	8.8136	34.1111	26.455	160.07	0.322	0.2374
200.0	8.5361	34.1284	26.512	154.96	0.354	0.2074
250.0	8.1449	34.1703	26.605	146.91	0.429	0.1801
300.0	7.8082	34.1843	26.666	141.80	0.502	0.1405
307.0	7.6979	34.1891	26.686	139.97	0.512	0.1281

STATION: 32		DATE: 3-June-1996	2218 UTC			
LAT: 35° 59.6 N		LON: 121° 38.0 W				
P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$
1.0	10.8623	33.8259	25.886	210.51	0.002	0.3619
5.0	10.8615	33.8260	25.887	210.58	0.011	0.3617
10.0	10.8439	33.8262	25.890	210.37	0.021	0.3586
15.0	10.8207	33.8252	25.893	210.16	0.032	0.3536
20.0	10.6967	33.8221	25.913	208.41	0.042	0.3288
25.0	10.5771	33.8235	25.935	206.43	0.052	0.3084
30.0	10.5925	33.8292	25.937	206.36	0.063	0.3156
40.0	10.4972	33.8423	25.964	204.02	0.083	0.3089
50.0	10.1273	33.8686	26.048	196.20	0.103	0.2650
60.0	9.9987	33.9086	26.101	191.36	0.123	0.2743
70.0	9.8703	33.9333	26.143	187.66	0.142	0.2718
80.0	9.4550	33.9512	26.225	179.95	0.160	0.2163
90.0	9.3950	33.9915	26.267	176.22	0.178	0.2380
100.0	9.1650	34.0232	26.329	170.49	0.195	0.2254
120.0	9.0532	34.0431	26.363	167.67	0.229	0.2228
140.0	8.9698	34.0617	26.391	165.38	0.262	0.2238
160.0	8.9614	34.0675	26.397	165.20	0.295	0.2266
180.0	8.9471	34.0798	26.409	164.43	0.328	0.2338
200.0	8.8691	34.0904	26.430	162.82	0.361	0.2294
250.0	8.4050	34.1686	26.564	150.90	0.440	0.2181
300.0	8.0771	34.1825	26.625	145.86	0.514	0.1788
350.0	7.7900	34.2153	26.694	140.05	0.585	0.1616
400.0	7.0465	34.2107	26.796	130.62	0.653	0.0519
450.0	6.4532	34.2273	26.889	122.02	0.715	-0.0150
461.0	6.3252	34.2327	26.910	120.07	0.729	-0.0275

**STATION: 33**  
**LAT: 35° 58.6 N**

**DATE: 3-June-1996 2302 UTC**  
**LON: 121° 39.8 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$
1.0	10.9164	33.7955	25.853	213.67	0.002	0.3476
5.0	10.9175	33.7955	25.853	213.78	0.011	0.3477
10.0	10.9093	33.7966	25.855	213.66	0.021	0.3471
15.0	10.8083	33.8059	25.881	211.38	0.032	0.3360
20.0	10.7555	33.8100	25.893	210.29	0.043	0.3297
25.0	10.7219	33.8130	25.902	209.62	0.053	0.3259
30.0	10.7059	33.8152	25.906	209.29	0.064	0.3247
40.0	9.9539	33.8427	26.057	195.13	0.084	0.2149
50.0	9.4536	33.8745	26.165	185.05	0.103	0.1559
60.0	9.5169	33.9604	26.222	179.86	0.121	0.2341
70.0	9.1060	33.9926	26.314	171.29	0.138	0.1922
80.0	9.1116	34.0102	26.327	170.26	0.155	0.2068
90.0	9.0839	34.0158	26.336	169.61	0.172	0.2067
100.0	9.0739	34.0194	26.341	169.37	0.189	0.2077
120.0	8.9883	34.0688	26.393	164.77	0.223	0.2327
140.0	8.9052	34.0847	26.419	162.69	0.256	0.2317
160.0	8.7271	34.1128	26.469	158.27	0.288	0.2255
180.0	8.6546	34.1242	26.490	156.69	0.319	0.2228
200.0	8.2117	34.0767	26.520	153.99	0.350	0.1170
250.0	8.1238	34.1916	26.625	145.02	0.425	0.1937
300.0	7.8602	34.2066	26.676	140.90	0.496	0.1657
350.0	7.3820	34.2016	26.741	135.23	0.565	0.0921
400.0	7.1467	34.2118	26.783	131.93	0.632	0.0666
450.0	6.5821	34.2231	26.869	124.07	0.696	-0.0014
500.0	6.1717	34.2403	26.936	117.99	0.757	-0.0416
503.0	6.1560	34.2416	26.939	117.73	0.760	-0.0426

**STATION: 34**  
**LAT: 35° 57.5 N**

**DATE: 3-June-1996 2352 UTC**  
**LON: 121° 42.1 W**

P (dbar)	T (°C)	S (PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$
1.0	10.8765	33.8104	25.872	211.90	0.002	0.3522
5.0	10.8771	33.8103	25.872	212.00	0.011	0.3522
10.0	10.8808	33.8100	25.871	212.19	0.021	0.3525
15.0	10.8723	33.8105	25.873	212.12	0.032	0.3512
20.0	10.8509	33.8091	25.876	211.97	0.042	0.3461
25.0	10.7715	33.8030	25.885	211.19	0.053	0.3269
30.0	10.6250	33.7898	25.901	209.82	0.064	0.2902
40.0	10.1594	33.7692	25.965	203.89	0.084	0.1920
50.0	9.6524	33.8100	26.082	192.94	0.104	0.1379
60.0	9.5495	33.8311	26.116	189.96	0.123	0.1372
70.0	9.1135	33.8803	26.225	179.75	0.141	0.1045
80.0	8.8947	33.9202	26.291	173.64	0.159	0.1009
90.0	8.7659	33.9457	26.331	169.99	0.176	0.1006
100.0	8.6401	33.9634	26.365	166.98	0.193	0.0947
120.0	8.4706	33.9958	26.417	162.42	0.226	0.0937
140.0	8.2962	34.0179	26.461	158.56	0.258	0.0842
160.0	8.1335	34.0350	26.499	155.27	0.290	0.0728
180.0	7.9727	34.0561	26.539	151.72	0.320	0.0652
200.0	7.7759	34.0807	26.588	147.41	0.350	0.0554
250.0	7.6750	34.1576	26.664	141.06	0.422	0.1008
300.0	7.5640	34.2108	26.722	136.34	0.491	0.1260
350.0	7.1167	34.2040	26.780	131.35	0.559	0.0570
400.0	6.8504	34.2153	26.826	127.58	0.623	0.0288
450.0	6.4685	34.2182	26.880	122.91	0.686	-0.0203
500.0	6.1095	34.2336	26.939	117.68	0.746	-0.0548
507.0	6.0609	34.2367	26.948	116.90	0.754	-0.0585

**STATION: 35**  
**LAT: 36° 0.2 N**

**DATE: 4-June-1996 0044 UTC**  
**LON: 121° 44.3 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$
1.0	10.3930	33.8271	25.969	202.61	0.002	0.2794
5.0	10.3714	33.8362	25.980	201.66	0.010	0.2827
10.0	10.3549	33.8411	25.987	201.14	0.020	0.2835
15.0	10.2674	33.8678	26.023	197.83	0.030	0.2893
20.0	10.2120	33.8797	26.042	196.15	0.040	0.2890
25.0	10.1701	33.8877	26.055	194.97	0.050	0.2879
30.0	10.1172	33.8976	26.072	193.49	0.059	0.2865
40.0	9.9897	33.9197	26.111	189.99	0.079	0.2820
50.0	9.9180	33.9248	26.128	188.66	0.098	0.2735
60.0	9.8313	33.9193	26.138	187.88	0.116	0.2543
70.0	9.6610	33.9375	26.181	184.02	0.135	0.2398
80.0	9.1675	33.9186	26.246	177.91	0.153	0.1435
90.0	9.0049	33.9118	26.267	176.12	0.171	0.1117
100.0	8.7174	33.9622	26.352	168.22	0.188	0.1059
120.0	8.5792	33.9976	26.401	163.89	0.221	0.1119
140.0	8.5956	34.0600	26.448	159.85	0.254	0.1635
160.0	8.2697	34.0996	26.529	152.45	0.285	0.1445
180.0	8.2267	34.1596	26.583	147.71	0.315	0.1850
200.0	8.0186	34.1637	26.617	144.72	0.344	0.1567
250.0	7.8430	34.1939	26.668	140.77	0.416	0.1539
300.0	7.6109	34.2090	26.714	137.14	0.485	0.1314
350.0	7.4069	34.2212	26.753	134.13	0.553	0.1112
400.0	6.8069	34.2175	26.834	126.82	0.618	0.0248
450.0	6.3307	34.1809	26.868	123.84	0.681	-0.0676
500.0	6.0542	34.2336	26.946	116.95	0.741	-0.0617
503.0	6.0425	34.2347	26.948	116.76	0.745	-0.0624

**STATION: 36**  
**LAT: 36° 3.1 N**

**DATE: 4-June-1996 0143 UTC**  
**LON: 121° 46.7 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$
1.0	10.2928	33.8297	25.989	200.78	0.002	0.2638
5.0	10.2839	33.8314	25.992	200.59	0.010	0.2636
10.0	10.2720	33.8333	25.995	200.36	0.020	0.2629
15.0	10.2278	33.8398	26.008	199.26	0.030	0.2602
20.0	10.0856	33.8624	26.050	195.38	0.040	0.2534
25.0	10.0195	33.8763	26.072	193.39	0.050	0.2529
30.0	10.0076	33.8793	26.077	193.07	0.059	0.2532
40.0	9.9816	33.9308	26.121	189.04	0.078	0.2893
50.0	9.4488	33.9214	26.203	181.49	0.097	0.1922
60.0	9.3806	33.9328	26.223	179.78	0.115	0.1898
70.0	9.3518	33.9337	26.228	179.45	0.133	0.1856
80.0	9.3058	33.9345	26.237	178.87	0.151	0.1786
90.0	9.1313	33.9423	26.271	175.78	0.169	0.1562
100.0	8.9382	33.9829	26.333	170.01	0.186	0.1572
120.0	8.6667	34.0336	26.416	162.52	0.219	0.1541
140.0	8.5892	34.1262	26.501	154.85	0.251	0.2148
160.0	8.5087	34.1647	26.544	151.14	0.281	0.2324
180.0	8.3370	34.1712	26.575	148.47	0.311	0.2109
200.0	8.1768	34.1820	26.608	145.66	0.341	0.1948
250.0	7.9582	34.2029	26.658	141.77	0.413	0.1780
300.0	7.7033	34.2163	26.706	137.92	0.483	0.1504
350.0	7.4403	34.2177	26.746	134.86	0.551	0.1131
400.0	6.8926	34.2294	26.832	127.11	0.616	0.0457
450.0	6.6408	34.2185	26.858	125.20	0.680	0.0027
500.0	6.1983	34.2162	26.914	120.13	0.741	-0.0572
525.0	6.0509	34.2351	26.948	117.11	0.771	-0.0612

**STATION: 37**           **DATE: 4-June-1996 0246 UTC**  
**LAT: 36° 6.2 N**       **LON: 121° 48.8 W**

P (dbar)	T (°C)	S (PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$
1.0	10.2875	33.8564	26.010	198.71	0.002	0.2841
5.0	10.2880	33.8568	26.011	198.77	0.010	0.2844
10.0	10.2888	33.8571	26.011	198.87	0.020	0.2847
15.0	10.2664	33.8566	26.014	198.64	0.030	0.2802
20.0	10.2412	33.8565	26.019	198.34	0.040	0.2757
25.0	10.1415	33.8592	26.038	196.62	0.050	0.2605
30.0	10.0998	33.8621	26.048	195.83	0.059	0.2555
40.0	9.8146	33.9105	26.134	187.87	0.079	0.2449
50.0	9.6282	33.9332	26.182	183.43	0.097	0.2313
60.0	9.4453	33.9611	26.234	178.68	0.115	0.2229
70.0	9.3050	33.9687	26.263	176.13	0.133	0.2056
80.0	9.0655	33.9547	26.291	173.68	0.151	0.1555
90.0	8.9713	33.9626	26.312	171.84	0.168	0.1465
100.0	8.9518	34.0078	26.351	168.37	0.185	0.1790
120.0	8.6800	34.0244	26.407	163.41	0.218	0.1488
140.0	8.6929	34.0738	26.444	160.29	0.250	0.1896
160.0	8.6378	34.1370	26.502	155.13	0.282	0.2305
180.0	8.4998	34.1507	26.535	152.40	0.313	0.2197
200.0	8.3112	34.1694	26.578	148.57	0.343	0.2052
250.0	7.9152	34.1837	26.649	142.57	0.416	0.1565
300.0	7.7298	34.1936	26.685	139.98	0.487	0.1364
350.0	7.4674	34.2060	26.733	136.11	0.555	0.1077
400.0	6.9546	34.2303	26.824	127.90	0.621	0.0548
450.0	6.5958	34.2183	26.863	124.61	0.685	-0.0034
501.0	6.0874	34.2244	26.934	118.08	0.747	-0.0648

**STATION: 38**  
**LAT: 36° 7.4 N**

**DATE: 4-June-1996 0336 UTC**  
**LON: 121° 46.7 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$
1.0	10.0170	33.8533	26.054	194.57	0.002	0.2348
5.0	10.0271	33.8755	26.070	193.16	0.010	0.2540
10.0	10.0144	33.8760	26.072	193.02	0.019	0.2522
15.0	9.9791	33.8774	26.080	192.45	0.029	0.2472
20.0	9.9238	33.8792	26.090	191.53	0.039	0.2391
25.0	9.9017	33.8809	26.095	191.16	0.048	0.2365
30.0	9.8810	33.8833	26.101	190.74	0.058	0.2348
40.0	9.7636	33.8850	26.122	188.95	0.077	0.2161
50.0	9.6907	33.9107	26.154	186.09	0.095	0.2240
60.0	9.6702	33.9163	26.162	185.54	0.114	0.2248
70.0	9.5865	33.9199	26.179	184.14	0.132	0.2135
80.0	9.5376	33.9228	26.190	183.36	0.151	0.2074
90.0	9.4596	33.9453	26.220	180.66	0.169	0.2121
100.0	9.2914	33.9669	26.265	176.62	0.187	0.2014
120.0	9.0500	34.0107	26.338	170.03	0.222	0.1966
140.0	8.8829	34.0886	26.426	162.06	0.255	0.2312
160.0	8.7626	34.1183	26.468	158.40	0.287	0.2354
180.0	8.6481	34.1205	26.488	156.87	0.318	0.2188
200.0	8.4280	34.1559	26.550	151.30	0.349	0.2124
250.0	8.2566	34.1984	26.610	146.48	0.423	0.2190
300.0	7.8459	34.2010	26.674	141.11	0.495	0.1592
350.0	7.2855	34.2089	26.761	133.33	0.564	0.0844
400.0	7.1231	34.2274	26.799	130.45	0.630	0.0757
450.0	6.3890	34.1819	26.862	124.54	0.694	-0.0592
500.0	6.2838	34.1969	26.888	122.70	0.756	-0.0616
505.0	6.2846	34.1962	26.887	122.83	0.762	-0.0621

**STATION: 39**                   **DATE: 4-June-1996 0429 UTC**  
**LAT: 36° 7.6 N**               **LON: 121° 44.5 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_\theta$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$
1.0	10.3152	33.8942	26.035	196.36	0.002	0.3188
5.0	10.3085	33.8946	26.037	196.31	0.010	0.3178
10.0	10.2800	33.8962	26.043	195.83	0.020	0.3140
15.0	9.8967	33.9153	26.123	188.32	0.029	0.2631
20.0	9.8354	33.9135	26.132	187.58	0.039	0.2512
25.0	9.7964	33.9156	26.140	186.90	0.048	0.2462
30.0	9.7829	33.9215	26.147	186.35	0.057	0.2485
40.0	9.7811	33.9261	26.151	186.18	0.076	0.2516
50.0	9.7410	33.9344	26.165	185.12	0.095	0.2512
60.0	9.6138	33.9424	26.192	182.71	0.113	0.2360
70.0	9.3604	33.9431	26.234	178.88	0.131	0.1945
80.0	9.3230	33.9496	26.246	178.02	0.149	0.1933
90.0	9.2146	33.9706	26.280	174.97	0.167	0.1921
100.0	9.1685	33.9766	26.292	174.00	0.184	0.1891
120.0	8.8617	34.0106	26.368	167.16	0.218	0.1666
140.0	8.7595	34.0614	26.424	162.21	0.251	0.1902
160.0	8.8174	34.1003	26.445	160.57	0.283	0.2297
180.0	8.7470	34.1082	26.463	159.27	0.315	0.2246
200.0	8.5816	34.1258	26.503	155.83	0.347	0.2123
250.0	8.2796	34.1636	26.579	149.40	0.423	0.1951
300.0	8.0566	34.2096	26.649	143.55	0.497	0.1971
350.0	7.4651	34.2014	26.730	136.42	0.566	0.1038
400.0	7.1004	34.2204	26.796	130.65	0.633	0.0670
450.0	6.9478	34.2162	26.814	129.58	0.698	0.0421
500.0	6.8448	34.2163	26.829	128.87	0.763	0.0276
521.0	6.6686	34.2199	26.856	126.47	0.790	0.0066

**STATION: 40**                   **DATE: 4-June-1996 0515 UTC**  
**LAT: 36° 8.8 N**               **LON: 121° 43.1 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_\theta$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$
1.0	10.6566	33.8376	25.932	206.20	0.002	0.3342
5.0	10.2476	33.8704	26.028	197.11	0.010	0.2881
10.0	10.0383	33.8650	26.060	194.22	0.020	0.2476
15.0	9.9302	33.8695	26.082	192.25	0.030	0.2326
20.0	9.7744	33.9042	26.135	187.30	0.039	0.2335
25.0	9.7547	33.9139	26.146	186.37	0.048	0.2378
30.0	9.7130	33.9325	26.167	184.42	0.058	0.2454
40.0	9.6977	33.9351	26.172	184.19	0.076	0.2447
50.0	9.6595	33.9431	26.185	183.19	0.094	0.2444
60.0	9.6391	33.9516	26.195	182.43	0.113	0.2475
70.0	9.5419	33.9679	26.224	179.88	0.131	0.2440
80.0	9.4551	33.9799	26.248	177.83	0.149	0.2389
90.0	9.4092	33.9872	26.261	176.76	0.166	0.2370
100.0	9.3193	34.0008	26.287	174.54	0.184	0.2328
120.0	9.2887	34.0105	26.299	173.73	0.219	0.2351
140.0	9.0672	34.0422	26.360	168.33	0.253	0.2239
160.0	8.9803	34.0649	26.392	165.68	0.286	0.2276
180.0	8.9631	34.0732	26.402	165.17	0.319	0.2311
200.0	8.6151	34.1214	26.494	156.66	0.351	0.2141
250.0	8.5291	34.1308	26.515	155.56	0.429	0.2073
300.0	7.8489	34.1943	26.668	141.65	0.503	0.1543
341.0	7.6576	34.1910	26.694	139.80	0.561	0.1233

STATION: 41		DATE: 4-June-1996 0552 UTC					
LAT: 36° 9.3 N	LON: 121° 42.3 W						
P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$	
1.0	10.6092	33.8571	25.955	203.96	0.002	0.3413	
5.0	10.6225	33.8596	25.955	204.08	0.010	0.3455	
10.0	10.5971	33.8805	25.976	202.22	0.020	0.3574	
15.0	10.3321	33.8999	26.037	196.51	0.030	0.3259	
20.0	10.0127	33.9148	26.103	190.32	0.040	0.2824	
25.0	9.9115	33.9255	26.129	188.00	0.049	0.2734	
30.0	9.9267	33.9317	26.131	187.89	0.059	0.2808	
40.0	9.9320	33.9365	26.134	187.82	0.078	0.2854	
50.0	9.9343	33.9366	26.134	188.05	0.096	0.2856	
60.0	9.8575	33.9413	26.151	186.67	0.115	0.2761	
70.0	9.7096	33.9506	26.183	183.82	0.134	0.2584	
80.0	9.6417	33.9592	26.201	182.30	0.152	0.2535	
90.0	9.6207	33.9612	26.206	182.01	0.170	0.2515	
99.0	9.6077	33.9627	26.210	181.88	0.187	0.2503	

STATION: 42		DATE: 5-June-1996 0042 UTC					
LAT: 35° 53.4 N	LON: 121° 29.6 W						
P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$	
1.0	11.8061	33.7565	25.660	231.99	0.002	0.4821	
5.0	11.8112	33.7554	25.659	232.25	0.012	0.4820	
10.0	11.6784	33.7552	25.683	230.03	0.023	0.4566	
15.0	11.4286	33.7476	25.724	226.32	0.035	0.4035	
20.0	11.2176	33.7365	25.753	223.60	0.046	0.3556	
25.0	10.7509	33.7410	25.840	215.44	0.057	0.2741	
30.0	10.2657	33.7969	25.968	203.37	0.067	0.2326	
40.0	10.1078	33.8189	26.013	199.37	0.087	0.2225	
50.0	9.7548	33.8596	26.104	190.89	0.107	0.1943	
57.0	9.5066	33.9030	26.179	183.89	0.120	0.1871	

**STATION: 43**  
**LAT: 35° 52.6 N**

**DATE: 5-June-1996 0136 UTC**  
**LON: 121° 34.1 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$
1.0	11.9479	33.6546	25.555	242.04	0.002	0.4286
5.0	11.9555	33.6546	25.553	242.26	0.012	0.4300
10.0	11.9635	33.6545	25.552	242.53	0.024	0.4313
15.0	11.9498	33.6543	25.554	242.42	0.036	0.4284
20.0	11.9062	33.6530	25.562	241.85	0.048	0.4189
25.0	11.8882	33.6517	25.564	241.73	0.061	0.4143
30.0	11.8267	33.6505	25.575	240.84	0.073	0.4015
40.0	11.3006	33.5634	25.604	238.26	0.096	0.2334
50.0	10.2332	33.6540	25.863	213.82	0.119	0.1133
60.0	9.6419	33.7804	26.061	195.17	0.140	0.1124
70.0	9.3868	33.8278	26.140	187.85	0.159	0.1075
80.0	9.2708	33.8577	26.182	184.03	0.177	0.1120
90.0	9.2002	33.8899	26.219	180.74	0.196	0.1258
100.0	8.9926	33.9705	26.315	171.76	0.213	0.1561
120.0	9.0212	34.0601	26.381	165.92	0.247	0.2311
140.0	8.8687	34.1027	26.439	160.80	0.280	0.2401
160.0	8.7925	34.1330	26.475	157.76	0.311	0.2517
180.0	8.6015	34.1669	26.532	152.73	0.342	0.2482
200.0	8.2499	34.1806	26.596	146.84	0.372	0.2048
250.0	8.0721	34.1795	26.623	145.17	0.445	0.1764
300.0	7.9317	34.1871	26.650	143.39	0.517	0.1608
350.0	7.4109	34.1931	26.731	136.27	0.588	0.0895
400.0	6.5731	34.2214	26.868	123.37	0.652	-0.0033
443.0	6.2777	34.2379	26.920	118.82	0.704	-0.0293

STATION: 44  
LAT: 35° 50.6 N

DATE: 5-June-1996 0237 UTC  
LON: 121° 39.1 W

P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$
1.0	12.1022	33.6196	25.498	247.39	0.002	0.4307
5.0	12.1016	33.6234	25.501	247.19	0.012	0.4335
10.0	12.1022	33.6237	25.502	247.30	0.025	0.4337
15.0	12.1033	33.6239	25.502	247.42	0.037	0.4339
20.0	12.1049	33.6239	25.502	247.57	0.049	0.4341
25.0	12.1039	33.6236	25.502	247.68	0.062	0.4336
30.0	12.0939	33.6232	25.503	247.65	0.074	0.4312
40.0	11.9798	33.6323	25.532	245.16	0.099	0.4161
50.0	10.4136	33.8216	25.963	204.38	0.121	0.2776
60.0	9.5837	33.7993	26.085	192.85	0.141	0.1177
70.0	9.3235	33.8431	26.162	185.74	0.160	0.1092
80.0	9.1175	33.8821	26.226	179.86	0.178	0.1064
90.0	8.8258	33.9233	26.304	172.56	0.195	0.0923
100.0	8.6598	33.9357	26.340	169.33	0.213	0.0758
120.0	8.4549	33.9523	26.385	165.41	0.246	0.0569
140.0	8.1503	33.9853	26.457	158.86	0.279	0.0363
160.0	7.9229	34.0026	26.504	154.65	0.310	0.0158
180.0	7.7661	34.0083	26.532	152.32	0.341	-0.0030
200.0	7.7570	34.0422	26.560	150.00	0.371	0.0222
250.0	7.4193	34.0935	26.650	142.23	0.444	0.0134
300.0	7.2011	34.1381	26.716	136.65	0.514	0.0173
350.0	6.9885	34.2263	26.816	127.92	0.580	0.0570
400.0	6.8095	34.2387	26.850	125.28	0.643	0.0418
450.0	6.4271	34.2470	26.908	120.22	0.704	-0.0029
500.0	6.1055	34.2561	26.957	115.96	0.764	-0.0376
503.0	6.0953	34.2563	26.959	115.84	0.767	-0.0387

**STATION: 45**  
**LAT: 35° 50.6 N**

**DATE: 5-June-1996 0346 UTC**  
**LON: 121° 44.1 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$
1.0	12.3420	33.6301	25.461	250.96	0.003	0.4857
5.0	12.3332	33.6318	25.464	250.78	0.013	0.4852
10.0	12.2868	33.6383	25.478	249.57	0.025	0.4811
15.0	11.9255	33.6695	25.571	240.86	0.037	0.4357
20.0	10.4718	33.6680	25.832	216.10	0.049	0.1669
25.0	10.1863	33.7267	25.927	207.17	0.059	0.1632
30.0	10.2464	33.7658	25.947	205.35	0.070	0.2046
40.0	10.2872	33.8305	25.991	201.43	0.090	0.2627
50.0	10.1303	33.8564	26.038	197.16	0.110	0.2558
60.0	9.7664	33.8682	26.109	190.63	0.129	0.2029
70.0	9.6362	33.8801	26.140	187.88	0.148	0.1903
80.0	9.3478	33.8984	26.202	182.20	0.167	0.1569
90.0	9.0299	33.8945	26.250	177.79	0.185	0.1020
100.0	8.7761	33.9270	26.315	171.72	0.202	0.0872
120.0	8.5247	33.9548	26.376	166.26	0.236	0.0697
140.0	8.2126	33.9737	26.438	160.63	0.268	0.0365
160.0	7.9353	33.9895	26.492	155.80	0.300	0.0072
180.0	7.8850	34.0068	26.514	154.12	0.331	0.0133
200.0	7.6839	34.0175	26.552	150.80	0.362	-0.0080
250.0	7.4127	34.1332	26.682	139.18	0.434	0.0439
300.0	7.2022	34.1882	26.755	132.94	0.502	0.0571
350.0	6.8249	34.2214	26.834	126.06	0.566	0.0309
400.0	6.4484	34.2410	26.900	120.26	0.628	-0.0042
450.0	6.1583	34.2580	26.951	115.85	0.687	-0.0288
500.0	5.9660	34.2841	26.997	112.05	0.744	-0.0329
505.0	5.9430	34.2875	27.002	111.57	0.750	-0.0332

**STATION: 46**  
**LAT: 35° 55.7 N**

**DATE: 5-June-1996 0445 UTC**  
**LON: 121° 44.1 W**

P (dbar)	T (°C)	S (PSS)	$\gamma_e$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma \Delta D$	$\pi$
1.0	12.1218	33.6260	25.500	247.27	0.002	0.4395
5.0	12.1213	33.6263	25.500	247.33	0.012	0.4396
10.0	12.1224	33.6266	25.500	247.45	0.025	0.4399
15.0	12.1228	33.6263	25.500	247.59	0.037	0.4396
20.0	12.1260	33.6260	25.499	247.79	0.050	0.4398
25.0	12.1269	33.6255	25.499	247.96	0.062	0.4395
30.0	11.9676	33.6509	25.549	243.34	0.074	0.4289
40.0	10.8372	33.8074	25.877	212.29	0.096	0.3419
50.0	10.0658	33.8708	26.060	195.05	0.117	0.2562
60.0	9.6727	33.8690	26.125	189.09	0.136	0.1878
70.0	9.4515	33.8662	26.159	186.01	0.154	0.1486
80.0	9.2538	33.8825	26.204	181.92	0.173	0.1289
90.0	8.9751	33.9023	26.264	176.37	0.191	0.0994
100.0	8.8183	33.9215	26.304	172.75	0.208	0.0896
120.0	8.4451	33.9473	26.382	165.65	0.242	0.0514
140.0	8.0514	33.9963	26.480	156.62	0.274	0.0302
160.0	7.9194	34.0000	26.503	154.79	0.305	0.0132
180.0	7.8339	34.0103	26.524	153.13	0.336	0.0085
200.0	7.6534	34.0808	26.606	145.66	0.366	0.0377
250.0	7.2616	34.1305	26.701	137.30	0.436	0.0204
300.0	7.2898	34.2108	26.761	132.48	0.503	0.0871
350.0	6.9101	34.2329	26.831	126.36	0.568	0.0515
400.0	6.5133	34.2394	26.890	121.24	0.630	0.0030
450.0	6.3161	34.2547	26.929	118.17	0.690	-0.0112
500.0	5.9108	34.2559	26.981	113.44	0.748	-0.0620
509.0	5.8828	34.2582	26.987	113.02	0.758	-0.0638

**STATION: 47**                   **DATE: 5-June-1996 0717 UTC**  
**LAT: 36° 5.4 N**               **LON: 121° 42.5 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$
1.0	11.5825	33.7247	25.677	230.39	0.002	0.4146
5.0	11.6214	33.7239	25.669	231.22	0.012	0.4212
10.0	11.4573	33.7242	25.700	228.44	0.023	0.3905
15.0	10.3111	33.7569	25.929	206.76	0.034	0.2091
20.0	10.2066	33.7575	25.947	205.11	0.044	0.1913
25.0	10.1063	33.7606	25.967	203.36	0.054	0.1763
30.0	9.8960	33.7803	26.018	198.62	0.064	0.1558
40.0	9.4810	33.8253	26.122	188.93	0.084	0.1216
50.0	9.2628	33.8866	26.206	181.19	0.102	0.1341
60.0	9.1772	33.9708	26.285	173.81	0.120	0.1867
70.0	9.1798	33.9779	26.291	173.52	0.137	0.1925
80.0	9.1677	33.9802	26.295	173.35	0.155	0.1922
90.0	9.1315	33.9833	26.303	172.74	0.172	0.1887
100.0	9.0847	33.9992	26.323	171.04	0.189	0.1935
120.0	8.9987	34.0382	26.368	167.20	0.223	0.2102
140.0	8.8752	34.0849	26.424	162.22	0.256	0.2271
160.0	8.7311	34.1104	26.467	158.51	0.288	0.2241
180.0	8.6266	34.1360	26.503	155.39	0.319	0.2277
200.0	8.3910	34.1739	26.570	149.42	0.350	0.2209
250.0	8.1338	34.1835	26.617	145.77	0.424	0.1888
300.0	7.7913	34.2069	26.686	139.88	0.495	0.1559
350.0	7.4831	34.1994	26.726	136.82	0.565	0.1048
400.0	7.0369	34.2093	26.796	130.59	0.631	0.0495
450.0	6.4584	34.2000	26.867	124.12	0.695	-0.0359
500.0	6.1035	34.2400	26.945	117.12	0.755	-0.0505
503.0	6.0984	34.2406	26.946	117.05	0.759	-0.0507

**STATION: 48**  
**LAT: 36° 2.4 N**

**DATE: 5-June-1996 0807 UTC**  
**LON: 121° 40.2 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_e$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$
1.0	11.7109	33.7098	25.642	233.75	0.002	0.4271
5.0	11.7081	33.7085	25.641	233.88	0.012	0.4254
10.0	11.6768	33.7116	25.650	233.22	0.023	0.4218
15.0	11.3949	33.7160	25.705	228.07	0.035	0.3723
20.0	10.6397	33.6835	25.815	217.73	0.046	0.2089
25.0	10.2991	33.6760	25.868	212.76	0.057	0.1427
30.0	9.9995	33.7296	25.961	204.04	0.067	0.1332
40.0	9.8410	33.7764	26.024	198.23	0.087	0.1432
50.0	9.3681	33.8441	26.155	185.97	0.107	0.1177
60.0	9.2243	33.8689	26.198	182.10	0.125	0.1136
70.0	9.1596	33.8876	26.223	179.90	0.143	0.1178
80.0	9.2286	33.9725	26.279	174.86	0.161	0.1960
90.0	9.2228	34.0241	26.320	171.12	0.178	0.2357
100.0	9.0538	34.0602	26.376	166.04	0.195	0.2367
120.0	8.9820	34.0664	26.392	164.85	0.228	0.2298
140.0	8.8894	34.0823	26.420	162.63	0.261	0.2273
160.0	8.6289	34.1162	26.487	156.54	0.293	0.2128
180.0	8.4839	34.1463	26.533	152.50	0.324	0.2138
200.0	8.4016	34.1708	26.566	149.80	0.354	0.2202
250.0	8.0018	34.1574	26.616	145.78	0.428	0.1485
300.0	7.8611	34.2126	26.681	140.47	0.500	0.1706
350.0	7.1133	34.2088	26.785	130.94	0.568	0.0603
400.0	6.7898	34.2170	26.836	126.63	0.632	0.0220
450.0	6.2636	34.2188	26.907	120.14	0.694	-0.0463
500.0	5.9095	34.2513	26.978	113.76	0.752	-0.0659
503.0	5.9084	34.2513	26.978	113.78	0.755	-0.0660

**STATION: 49**  
**LAT: 36° 3.9 N**

**DATE: 5-June-1996 0849 UTC**  
**LON: 121° 37.5 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_e$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$
1.0	11.1215	33.7685	25.795	219.17	0.002	0.3636
5.0	11.0657	33.7701	25.807	218.18	0.011	0.3546
10.0	10.6675	33.7921	25.894	209.95	0.022	0.3002
15.0	10.4264	33.8294	25.966	203.28	0.032	0.2867
20.0	10.3677	33.8353	25.981	201.98	0.042	0.2810
25.0	10.2466	33.8448	26.009	199.40	0.052	0.2673
30.0	9.7009	33.9235	26.162	184.90	0.062	0.2362
40.0	9.4436	33.9384	26.217	179.96	0.080	0.2050
50.0	9.3943	33.9339	26.221	179.71	0.098	0.1931
60.0	9.2450	33.9569	26.264	175.89	0.116	0.1867
70.0	9.2367	33.9676	26.273	175.16	0.133	0.1936
80.0	9.2709	33.9797	26.278	174.97	0.151	0.2086
83.0	9.2507	33.9789	26.280	174.78	0.156	0.2046

**STATION: 50**  
**LAT: 36° 14.6 N**

**DATE: 5-June-1996 2342 UTC**  
**LON: 121° 52.6 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$
1.0	10.9693	33.7967	25.845	214.48	0.002	0.3582
5.0	10.8831	33.8017	25.864	212.74	0.011	0.3464
10.0	10.5355	33.8014	25.925	207.06	0.021	0.2840
15.0	10.2066	33.8270	26.002	199.86	0.031	0.2464
20.0	10.1559	33.8380	26.019	198.32	0.041	0.2463
25.0	9.9578	33.8919	26.095	191.23	0.051	0.2548
30.0	9.8192	33.9146	26.136	187.44	0.061	0.2491
41.0	9.6423	33.9317	26.179	183.59	0.081	0.2326

**STATION: 51**  
**LAT: 36° 12.8 N**

**DATE: 6-June-1996 0008 UTC**  
**LON: 121° 53.7 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$
1.0	10.9957	33.7843	25.830	215.85	0.002	0.3531
5.0	10.9957	33.7850	25.831	215.88	0.011	0.3536
10.0	10.4031	33.8252	25.966	203.11	0.021	0.2794
15.0	9.9373	33.8071	26.032	197.00	0.031	0.1843
20.0	9.5915	33.8217	26.101	190.54	0.041	0.1375
25.0	9.5000	33.8289	26.121	188.67	0.050	0.1279
30.0	9.3632	33.8515	26.161	184.96	0.060	0.1231
40.0	9.2990	33.8838	26.197	181.77	0.078	0.1380
50.0	9.1584	33.9353	26.260	175.97	0.096	0.1557
60.0	9.2208	34.0116	26.310	171.46	0.113	0.2260
70.0	9.2200	34.0132	26.312	171.52	0.131	0.2269
80.0	9.2024	34.0152	26.316	171.28	0.148	0.2255
90.0	9.1476	34.0241	26.332	169.97	0.165	0.2235
100.0	9.1335	34.0276	26.337	169.68	0.182	0.2238
120.0	9.0372	34.0493	26.370	166.97	0.215	0.2251
140.0	8.9029	34.0856	26.420	162.59	0.248	0.2320
160.0	8.8113	34.0887	26.437	161.33	0.281	0.2196
180.0	8.3611	34.0801	26.500	155.59	0.312	0.1426
200.0	8.4916	34.1481	26.534	152.83	0.343	0.2160
250.0	8.2477	34.1742	26.592	148.14	0.418	0.1987
300.0	7.8447	34.2007	26.674	141.12	0.490	0.1587
345.0	7.5804	34.2027	26.714	137.89	0.553	0.1213

**STATION: 52**  
**LAT: 36° 11.0 N**

**DATE: 6-June-1996 0044 UTC**  
**LON: 121° 54.8 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$
1.0	10.8626	33.8743	25.924	206.93	0.002	0.4002
5.0	10.8558	33.8779	25.928	206.64	0.010	0.4018
10.0	10.3868	33.9008	26.028	197.24	0.020	0.3364
15.0	10.1921	33.9142	26.072	193.17	0.030	0.3129
20.0	10.1482	33.9142	26.080	192.56	0.040	0.3052
25.0	10.0969	33.9143	26.089	191.81	0.049	0.2964
30.0	9.9433	33.9177	26.117	189.19	0.059	0.2726
40.0	9.6158	33.8895	26.150	186.30	0.078	0.1950
50.0	9.0634	33.8908	26.241	177.83	0.096	0.1052
60.0	9.0568	33.9307	26.273	174.95	0.114	0.1355
70.0	8.9445	33.9726	26.324	170.32	0.131	0.1505
80.0	8.8425	34.0002	26.362	166.92	0.148	0.1560
90.0	8.9017	34.0463	26.389	164.57	0.164	0.2017
100.0	8.9008	34.0687	26.407	163.08	0.181	0.2190
120.0	8.8601	34.0943	26.433	160.93	0.213	0.2324
140.0	8.8156	34.1109	26.454	159.39	0.245	0.2382
160.0	8.7244	34.1294	26.483	157.00	0.277	0.2381
180.0	8.5910	34.1359	26.509	154.87	0.308	0.2221
200.0	8.2848	34.1340	26.554	150.81	0.339	0.1733
250.0	8.1456	34.1826	26.614	146.01	0.413	0.1899
300.0	7.7085	34.2075	26.699	138.65	0.483	0.1442
350.0	7.1846	34.2102	26.776	131.83	0.551	0.0713
400.0	6.9202	34.2207	26.821	128.13	0.616	0.0426
450.0	6.3247	34.2096	26.892	121.63	0.679	-0.0457
500.0	6.1512	34.2206	26.923	119.19	0.739	-0.0598
509.0	6.1031	34.2245	26.933	118.38	0.750	-0.0628

**STATION: 53**           **DATE: 6-June-1996 0132 UTC**  
**LAT: 36° 8.9 N**       **LON: 121° 55.9 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$
1.0	11.1146	33.8645	25.871	211.94	0.002	0.4383
5.0	11.1086	33.8657	25.873	211.84	0.011	0.4381
10.0	10.8793	33.8760	25.922	207.29	0.021	0.4044
15.0	10.5439	33.8885	25.991	200.85	0.031	0.3542
20.0	10.3933	33.8922	26.021	198.19	0.041	0.3305
25.0	10.3268	33.8891	26.030	197.43	0.051	0.3163
30.0	10.2519	33.8893	26.043	196.29	0.061	0.3033
40.0	10.1439	33.8947	26.066	194.34	0.081	0.2886
50.0	9.5140	33.8501	26.136	187.80	0.100	0.1465
60.0	9.3140	33.8515	26.170	184.77	0.118	0.1145
70.0	9.0817	33.8854	26.234	178.88	0.137	0.1035
80.0	8.9407	33.9032	26.270	175.60	0.154	0.0948
90.0	8.8280	33.9160	26.298	173.13	0.172	0.0869
100.0	8.6356	33.9556	26.359	167.49	0.189	0.0878
120.0	8.5301	34.0497	26.450	159.29	0.221	0.1456
140.0	8.5894	34.1137	26.491	155.78	0.253	0.2050
160.0	8.3879	34.1093	26.519	153.47	0.284	0.1701
180.0	8.2318	34.0968	26.533	152.45	0.314	0.1362
200.0	7.8993	34.1256	26.605	145.83	0.344	0.1090
250.0	7.9136	34.1949	26.658	141.72	0.416	0.1651
300.0	7.6191	34.2034	26.708	137.67	0.485	0.1281
350.0	7.2377	34.2084	26.767	132.70	0.553	0.0772
400.0	6.7670	34.2329	26.851	125.13	0.617	0.0315
450.0	6.3334	34.2350	26.911	119.86	0.679	-0.0245
500.0	6.1097	34.2737	26.971	114.70	0.737	-0.0231
503.0	6.1041	34.2771	26.974	114.41	0.740	-0.0212

**Table A3.** Data listings at selected pressures of temperature ( $^{\circ}\text{C}$ ), salinity (PSS), potential density anomaly,  $\gamma_0$ , ( $\text{kg m}^{-3}$ ), specific volume anomaly,  $\delta$ , ( $10^{-8} \text{ m}^3 \text{ kg}^{-1}$ ), summation of dynamic height,  $\Sigma\Delta D$ , ( $0.1 \text{ m}^2 \text{ s}^{-2}$ ), and spiciness,  $\pi$ , for CTD stations occupied during leg 5 (6-8 June 1996) of the cruise aboard the NOAA Ship *McArthur*.

**STATION: 54**      **DATE: 6-June-1996 1306 UTC**  
**LAT: 36° 18.2 N**      **LON: 122° 24.0 W**

P(dbar)	T( $^{\circ}\text{C}$ )	S(PSS)	$\gamma_0$ ( $\text{kg m}^{-3}$ )	$\delta$	$\Sigma\Delta D$	$\pi$
2.0	12.1201	33.7941	25.630	234.86	0.005	0.5720
5.0	12.0236	33.7655	25.627	235.30	0.012	0.5307
10.0	11.3843	33.7831	25.759	222.81	0.023	0.4235
15.0	10.8393	33.8132	25.881	211.36	0.034	0.3474
20.0	10.7888	33.8094	25.887	210.90	0.045	0.3352
25.0	10.7777	33.8080	25.888	210.92	0.055	0.3320
30.0	10.4610	33.8137	25.948	205.33	0.066	0.2801
40.0	10.0350	33.8350	26.038	197.00	0.086	0.2227
50.0	9.6465	33.8789	26.137	187.74	0.105	0.1914
60.0	9.3090	33.9150	26.220	179.99	0.123	0.1640
70.0	9.2332	33.9288	26.244	177.98	0.141	0.1624
80.0	9.0709	33.9812	26.311	171.79	0.159	0.1774
90.0	8.9564	34.0046	26.347	168.49	0.176	0.1774
100.0	8.8727	34.0204	26.373	166.24	0.192	0.1764
120.0	8.7823	34.0648	26.422	161.94	0.225	0.1969
140.0	8.5080	34.0664	26.466	158.08	0.257	0.1550
160.0	7.9856	34.0259	26.514	153.81	0.288	0.0435
180.0	7.9280	34.0729	26.559	149.82	0.319	0.0719
200.0	7.9215	34.1237	26.600	146.29	0.348	0.1108
250.0	7.1615	34.1104	26.699	137.41	0.419	-0.0094
300.0	6.9625	34.1711	26.775	130.93	0.486	0.0105
350.0	6.6241	34.1914	26.837	125.59	0.550	-0.0197
400.0	6.3199	34.2070	26.890	121.09	0.612	-0.0477
450.0	5.9935	34.2263	26.947	116.07	0.671	-0.0745
500.0	5.7386	34.2705	27.014	110.14	0.728	-0.0717
550.0	5.4792	34.3139	27.081	104.24	0.781	-0.0692
600.0	5.2524	34.3317	27.122	100.65	0.832	-0.0824
650.0	4.9413	34.3169	27.146	98.47	0.882	-0.1300
700.0	4.6633	34.3346	27.192	94.30	0.930	-0.1473
750.0	4.5036	34.3679	27.236	90.40	0.976	-0.1387
800.0	4.4715	34.3904	27.258	88.82	1.021	-0.1249
850.0	4.3385	34.4134	27.291	85.99	1.065	-0.1213
900.0	4.2463	34.4281	27.313	84.25	1.108	-0.1198
950.0	4.1270	34.4430	27.338	82.16	1.149	-0.1207
1000.0	3.9897	34.4572	27.363	79.90	1.190	-0.1239
1432.0	3.0758	34.5306	27.513	66.77	1.502	-0.1559

**STATION: 55**  
**LAT: 36° 25.1 N**

**DATE: 6-June-1996 1455 UTC**  
**LON: 122° 30.8 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$
2.0	12.3501	33.9349	25.696	228.66	0.005	0.7276
5.0	12.2482	33.7585	25.578	239.88	0.012	0.5687
10.0	11.8487	33.8685	25.740	224.68	0.023	0.5783
15.0	11.5215	33.8560	25.791	219.94	0.034	0.5066
20.0	11.2300	33.8416	25.833	216.04	0.045	0.4409
25.0	11.1055	33.8448	25.858	213.77	0.056	0.4205
30.0	10.7439	33.8103	25.896	210.29	0.066	0.3276
40.0	10.1301	33.8367	26.023	198.41	0.087	0.2404
50.0	9.5658	33.8925	26.161	185.46	0.106	0.1887
60.0	9.4452	33.9094	26.194	182.52	0.125	0.1819
70.0	9.2381	33.9500	26.259	176.48	0.142	0.1799
80.0	9.0243	33.9359	26.283	174.44	0.160	0.1340
90.0	8.8072	33.9332	26.315	171.54	0.177	0.0972
100.0	8.8346	33.9878	26.354	168.08	0.194	0.1446
120.0	8.9032	34.0718	26.409	163.25	0.228	0.2215
140.0	8.7291	34.1136	26.469	157.88	0.260	0.2267
160.0	8.3206	34.1032	26.524	152.93	0.291	0.1550
180.0	8.2681	34.1246	26.549	150.92	0.321	0.1636
200.0	8.0446	34.1118	26.573	148.95	0.351	0.1196
250.0	7.3611	34.1261	26.684	139.00	0.423	0.0310
300.0	7.3257	34.2122	26.757	132.88	0.491	0.0933
350.0	6.5493	34.1838	26.841	125.16	0.555	-0.0356
400.0	6.3232	34.2073	26.890	121.11	0.617	-0.0471
450.0	5.9994	34.2308	26.950	115.81	0.676	-0.0702
500.0	5.7874	34.2629	27.002	111.33	0.733	-0.0717
550.0	5.6183	34.2881	27.043	107.91	0.787	-0.0729
600.0	5.2854	34.2816	27.078	104.79	0.840	-0.1180
650.0	5.1704	34.3197	27.122	101.08	0.892	-0.1018
700.0	4.9050	34.3399	27.169	96.84	0.941	-0.1165
750.0	4.6911	34.3688	27.217	92.59	0.989	-0.1178
800.0	4.4826	34.3914	27.258	88.88	1.034	-0.1229
850.0	4.4388	34.4017	27.271	88.07	1.078	-0.1199
900.0	4.2412	34.4306	27.315	84.00	1.121	-0.1183
950.0	4.1221	34.4431	27.338	82.10	1.162	-0.1212
1000.0	3.9803	34.4584	27.365	79.70	1.203	-0.1239
1500.0	2.8399	34.5477	27.548	63.12	1.557	-0.1635
2000.0	2.1064	34.6069	27.659	52.47	1.844	-0.1796
2500.0	1.7895	34.6480	27.719	47.42	2.091	-0.1739
2816.0	1.7247	34.6569	27.733	46.98	2.240	-0.1736

STATION: 56  
LAT: 36° 32.2 N

DATE: 6-June-1996 2043 UTC  
LON: 122° 38.8 W

P(dbar)	T(°C)	S(PSS)	$\gamma_\theta$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$
2.0	12.7721	33.4003	25.199	275.86	0.006	0.3891
5.0	12.6112	33.4360	25.258	270.32	0.014	0.3852
10.0	12.3740	33.4898	25.346	262.11	0.027	0.3807
15.0	12.4067	33.5053	25.352	261.68	0.040	0.3993
20.0	12.3710	33.5042	25.358	261.23	0.053	0.3913
25.0	11.9593	33.5014	25.434	254.10	0.066	0.3089
30.0	11.5049	33.5080	25.524	245.69	0.079	0.2277
40.0	11.1304	33.4913	25.579	240.66	0.103	0.1447
50.0	10.3541	33.6887	25.869	213.23	0.125	0.1619
60.0	10.2962	33.6963	25.885	211.92	0.147	0.1576
70.0	10.2275	33.7158	25.912	209.56	0.168	0.1609
80.0	9.8484	33.7635	26.014	200.09	0.188	0.1334
90.0	9.7369	33.8736	26.119	190.35	0.208	0.2016
100.0	9.5452	33.8926	26.165	186.10	0.227	0.1844
120.0	9.1150	33.9883	26.310	172.68	0.263	0.1894
140.0	8.9447	34.0506	26.386	165.82	0.297	0.2110
160.0	8.5773	34.0434	26.438	161.17	0.329	0.1472
180.0	8.1341	34.0719	26.528	152.87	0.361	0.1018
200.0	7.5805	34.0410	26.585	147.60	0.391	-0.0044
250.0	7.1937	34.1074	26.692	138.08	0.462	-0.0073
300.0	7.1928	34.2002	26.766	131.93	0.529	0.0652
350.0	6.5719	34.1762	26.832	126.02	0.594	-0.0386
400.0	6.2994	34.2050	26.891	120.97	0.656	-0.0520
450.0	5.9841	34.2238	26.946	116.13	0.715	-0.0777
500.0	5.7353	34.2327	26.985	112.91	0.772	-0.1019
550.0	5.6028	34.2865	27.044	107.83	0.828	-0.0761
600.0	5.2177	34.2840	27.088	103.77	0.880	-0.1240
650.0	5.0634	34.3122	27.129	100.31	0.931	-0.1199
700.0	4.8185	34.3535	27.190	94.77	0.980	-0.1154
750.0	4.6409	34.3712	27.224	91.81	1.027	-0.1214
800.0	4.4699	34.3956	27.262	88.42	1.072	-0.1210
850.0	4.3583	34.4140	27.289	86.18	1.116	-0.1187
900.0	4.1917	34.4355	27.324	83.05	1.158	-0.1196
950.0	4.0592	34.4510	27.351	80.76	1.199	-0.1213
1000.0	3.9196	34.4649	27.377	78.49	1.239	-0.1248
1500.0	2.7819	34.5499	27.555	62.27	1.587	-0.1667
2000.0	2.1346	34.6055	27.656	52.92	1.874	-0.1785
2500.0	1.7721	34.6492	27.722	47.10	2.122	-0.1742
2756.0	1.6769	34.6599	27.739	45.92	2.240	-0.1741

**STATION: 57**  
**LAT: 36° 39.4 N**

**DATE: 6-June-1996 2329 UTC**  
**LON: 122° 44.8 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$
2.0	13.0823	33.5051	25.219	273.96	0.005	0.5348
5.0	13.0832	33.5047	25.219	274.08	0.014	0.5346
10.0	13.0794	33.5049	25.220	274.12	0.027	0.5338
15.0	12.8660	33.5142	25.269	269.54	0.041	0.4978
20.0	12.6926	33.4988	25.292	267.56	0.054	0.4507
25.0	12.3773	33.4768	25.336	263.49	0.068	0.3707
30.0	12.1533	33.4731	25.376	259.80	0.081	0.3238
40.0	10.8061	33.6537	25.763	223.14	0.105	0.2146
50.0	9.8070	33.7339	25.997	201.03	0.126	0.1035
60.0	9.5593	33.8229	26.108	190.72	0.146	0.1323
70.0	9.3719	33.8643	26.171	184.91	0.164	0.1340
80.0	9.2925	33.9005	26.212	181.18	0.183	0.1494
90.0	9.1819	33.9402	26.261	176.72	0.201	0.1627
100.0	9.0809	33.9640	26.296	173.59	0.218	0.1650
120.0	8.8440	34.0567	26.406	163.47	0.252	0.2002
140.0	8.6986	34.1241	26.482	156.64	0.284	0.2302
160.0	8.5621	34.1427	26.518	153.57	0.315	0.2233
180.0	8.4268	34.1517	26.546	151.25	0.345	0.2092
200.0	8.3020	34.1736	26.583	148.12	0.375	0.2072
250.0	7.6122	34.1779	26.689	138.67	0.447	0.1077
300.0	7.2335	34.1779	26.743	134.15	0.515	0.0533
350.0	6.5673	34.1604	26.820	127.14	0.580	-0.0517
400.0	6.3591	34.1998	26.879	122.14	0.642	-0.0484
450.0	6.0718	34.2357	26.945	116.38	0.702	-0.0573
500.0	5.7272	34.2597	27.007	110.80	0.759	-0.0816
550.0	5.4604	34.2780	27.054	106.67	0.813	-0.0998
600.0	5.1879	34.3115	27.113	101.36	0.865	-0.1057
650.0	4.9361	34.3181	27.148	98.31	0.915	-0.1297
700.0	4.8268	34.3549	27.190	94.77	0.963	-0.1133
750.0	4.6118	34.3810	27.235	90.73	1.009	-0.1168
800.0	4.4491	34.4002	27.268	87.83	1.054	-0.1196
850.0	4.3332	34.4162	27.294	85.72	1.097	-0.1196
900.0	4.2151	34.4296	27.317	83.77	1.139	-0.1218
950.0	4.0793	34.4467	27.345	81.32	1.181	-0.1227
1000.0	3.9427	34.4608	27.371	79.07	1.221	-0.1257
1500.0	2.9418	34.5410	27.534	64.83	1.575	-0.1600
2000.0	2.1063	34.6047	27.658	52.63	1.864	-0.1813
2500.0	1.7802	34.6485	27.720	47.26	2.113	-0.1741
2808.0	1.6568	34.6623	27.742	45.65	2.255	-0.1740

**STATION: 58**                   **DATE: 7-June-1996 0248 UTC**  
**LAT: 36° 46.7 N**              **LON: 122° 51.8 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$
2.0	12.3170	33.2132	25.142	281.29	0.006	0.1500
5.0	12.3219	33.2593	25.177	278.05	0.014	0.1876
10.0	12.4960	33.4057	25.257	270.55	0.028	0.3381
15.0	12.5416	33.4828	25.308	265.82	0.041	0.4081
20.0	12.5009	33.4933	25.325	264.42	0.054	0.4082
25.0	12.1266	33.5411	25.433	254.18	0.067	0.3728
30.0	11.6364	33.5585	25.539	244.26	0.080	0.2925
40.0	10.4417	33.5447	25.742	225.13	0.103	0.0631
50.0	9.5010	33.6069	25.948	205.64	0.125	-0.0486
60.0	9.3299	33.7232	26.067	194.54	0.145	0.0154
70.0	9.2496	33.7701	26.117	190.01	0.164	0.0393
80.0	9.1246	33.8273	26.182	184.03	0.183	0.0642
90.0	8.8509	33.8980	26.281	174.81	0.200	0.0762
100.0	8.7238	33.9239	26.321	171.16	0.218	0.0765
120.0	8.3735	33.9985	26.433	160.79	0.251	0.0810
140.0	8.4018	34.0625	26.480	156.80	0.283	0.1356
160.0	8.2175	34.0845	26.525	152.81	0.314	0.1246
180.0	8.0735	34.0975	26.557	150.09	0.344	0.1129
200.0	8.0157	34.1159	26.580	148.22	0.374	0.1186
250.0	7.6440	34.1530	26.665	140.97	0.446	0.0926
300.0	7.0873	34.1278	26.724	135.85	0.516	-0.0066
350.0	6.8545	34.1762	26.794	129.82	0.582	-0.0008
400.0	6.4894	34.2039	26.865	123.56	0.645	-0.0282
450.0	6.2715	34.2191	26.906	120.22	0.706	-0.0450
500.0	5.9483	34.2372	26.962	115.31	0.766	-0.0721
550.0	5.5758	34.2652	27.030	109.07	0.822	-0.0961
600.0	5.2817	34.2992	27.093	103.43	0.875	-0.1046
650.0	4.9629	34.3180	27.145	98.65	0.926	-0.1267
700.0	4.8265	34.3489	27.185	95.21	0.974	-0.1181
750.0	4.6938	34.3740	27.220	92.24	1.021	-0.1134
800.0	4.5225	34.3950	27.256	89.10	1.067	-0.1158
850.0	4.3886	34.4087	27.282	86.94	1.111	-0.1197
900.0	4.2763	34.4234	27.306	84.96	1.154	-0.1203
950.0	4.2076	34.4326	27.321	83.90	1.196	-0.1206
1000.0	4.0704	34.4476	27.347	81.58	1.237	-0.1233
1500.0	2.8597	34.5495	27.548	63.22	1.596	-0.1604
2000.0	2.0885	34.6103	27.663	52.01	1.884	-0.1782
2500.0	1.7244	34.6542	27.729	46.12	2.128	-0.1736
2680.0	1.6964	34.6577	27.735	46.10	2.212	-0.1740

**STATION: 59**  
**LAT: 36° 53.8 N**

**DATE: 7-June-1996 0547 UTC**  
**LON: 122° 59.1 W**

P (dbar)	T (°C)	S (PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$
2.0	12.6360	33.3135	25.159	279.74	0.006	0.2930
5.0	12.6307	33.3202	25.165	279.22	0.014	0.2972
10.0	12.4845	33.3313	25.202	275.82	0.028	0.2768
15.0	11.8349	33.3484	25.338	262.97	0.041	0.1640
20.0	11.4765	33.3785	25.428	254.54	0.054	0.1197
25.0	10.9195	33.4282	25.567	241.42	0.067	0.0564
30.0	10.7359	33.4481	25.615	236.96	0.079	0.0389
40.0	10.2607	33.5347	25.765	222.90	0.102	0.0234
50.0	9.5377	33.6510	25.977	202.94	0.123	-0.0075
60.0	9.3673	33.6642	26.015	199.50	0.143	-0.0254
70.0	9.1366	33.7224	26.098	191.82	0.162	-0.0169
80.0	9.1250	33.7708	26.137	188.23	0.181	0.0194
90.0	9.1596	33.8502	26.194	183.05	0.200	0.0878
100.0	9.0844	33.8526	26.208	181.91	0.218	0.0774
120.0	8.9725	33.9395	26.294	174.12	0.253	0.1279
140.0	8.7959	34.0348	26.397	164.73	0.287	0.1750
160.0	8.7089	34.1029	26.464	158.73	0.320	0.2148
180.0	8.5714	34.1233	26.502	155.51	0.351	0.2091
200.0	8.3577	34.1527	26.558	150.50	0.382	0.1991
250.0	7.8805	34.1837	26.654	142.07	0.455	0.1513
300.0	7.6284	34.1944	26.700	138.47	0.525	0.1223
350.0	7.2922	34.2083	26.759	133.47	0.593	0.0848
400.0	6.4249	34.1492	26.831	126.77	0.658	-0.0798
450.0	6.2687	34.2128	26.902	120.65	0.720	-0.0503
500.0	5.8452	34.2442	26.980	113.46	0.778	-0.0794
550.0	5.3831	34.2769	27.063	105.78	0.833	-0.1098
600.0	5.1691	34.3046	27.110	101.64	0.885	-0.1133
650.0	5.0346	34.3315	27.147	98.53	0.935	-0.1080
700.0	4.8575	34.3502	27.183	95.49	0.983	-0.1136
750.0	4.6109	34.3781	27.233	90.93	1.030	-0.1192
800.0	4.4396	34.3991	27.268	87.79	1.075	-0.1214
850.0	4.3188	34.4146	27.294	85.66	1.118	-0.1224
900.0	4.2414	34.4255	27.311	84.39	1.161	-0.1223
950.0	4.1082	34.4360	27.334	82.45	1.202	-0.1281
1000.0	3.9540	34.4525	27.363	79.82	1.243	-0.1311
1500.0	2.8066	34.5406	27.545	63.24	1.595	-0.1719
2000.0	2.1218	34.6084	27.659	52.55	1.882	-0.1772
2500.0	1.7721	34.6486	27.721	47.15	2.127	-0.1746
2884.0	1.6623	34.6624	27.743	45.95	2.305	-0.1740

**STATION: 60**           **DATE: 7-June-1996 1045 UTC**  
**LAT: 37° 0.7 N**       **LON: 123° 5.7 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$
2.0	12.7940	33.3082	25.124	283.06	0.006	0.3204
5.0	12.7770	33.2547	25.086	286.76	0.014	0.2744
10.0	12.6976	33.2547	25.101	285.40	0.029	0.2584
15.0	11.6760	33.2996	25.330	263.78	0.042	0.0950
20.0	10.5746	33.4480	25.643	234.08	0.055	0.0102
25.0	10.6141	33.4854	25.665	232.07	0.066	0.0469
30.0	10.5987	33.5173	25.693	229.55	0.078	0.0694
40.0	10.2184	33.6342	25.850	214.84	0.100	0.0951
50.0	9.7781	33.7377	26.005	200.30	0.121	0.1017
60.0	9.5937	33.7799	26.068	194.45	0.141	0.1040
70.0	9.3634	33.8575	26.167	185.28	0.160	0.1272
80.0	9.2412	33.8911	26.213	181.09	0.178	0.1336
90.0	9.1672	33.9093	26.239	178.79	0.196	0.1359
100.0	9.1135	33.9240	26.260	177.06	0.214	0.1386
120.0	8.9840	33.9631	26.311	172.54	0.249	0.1484
140.0	8.8781	33.9953	26.353	168.91	0.283	0.1567
160.0	8.7702	34.0026	26.376	167.10	0.316	0.1451
180.0	8.5913	34.0111	26.411	164.13	0.350	0.1235
200.0	8.5608	34.0299	26.431	162.63	0.382	0.1333
250.0	8.1392	34.0807	26.535	153.47	0.461	0.1084
300.0	7.5565	34.1265	26.657	142.49	0.535	0.0584
350.0	7.1319	34.1603	26.744	134.80	0.604	0.0246
400.0	6.9538	34.1779	26.783	131.77	0.671	0.0133
450.0	6.6699	34.1918	26.833	127.58	0.735	-0.0145
500.0	6.2866	34.2220	26.907	120.87	0.798	-0.0414
550.0	5.8021	34.2493	26.990	113.14	0.856	-0.0812
600.0	5.2437	34.2528	27.060	106.41	0.911	-0.1456
650.0	5.1170	34.2823	27.099	103.20	0.963	-0.1374
700.0	5.0330	34.3234	27.142	99.64	1.014	-0.1151
750.0	4.7033	34.3360	27.189	95.18	1.062	-0.1423
800.0	4.5945	34.3654	27.225	92.17	1.109	-0.1314
850.0	4.4323	34.4005	27.271	88.08	1.154	-0.1216
900.0	4.3007	34.4201	27.301	85.50	1.198	-0.1204
950.0	4.1443	34.4385	27.332	82.70	1.240	-0.1225
1000.0	3.9301	34.4511	27.364	79.64	1.280	-0.1346
1500.0	2.7991	34.5451	27.549	62.82	1.633	-0.1690
2000.0	2.0915	34.6111	27.664	51.98	1.921	-0.1774
2220.0	1.9439	34.6275	27.690	49.85	2.032	-0.1770

STATION: 61 DATE: 7-June-1996 1356 UTC  
 LAT: 37° 8.1 N LON: 123° 12.6 W

P (dbar)	T (°C)	S (PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$
2.0	12.5376	33.1714	25.067	288.41	0.006	0.1604
5.0	12.5321	33.3783	25.229	273.11	0.014	0.3237
10.0	12.4819	33.3013	25.179	277.99	0.028	0.2524
15.0	12.4119	33.3009	25.192	276.85	0.042	0.2381
20.0	12.0745	33.3393	25.286	268.02	0.055	0.2026
25.0	11.5817	33.3708	25.403	257.06	0.069	0.1334
30.0	10.3786	33.3999	25.639	234.62	0.081	-0.0630
35.0	10.3079	33.5735	25.787	220.70	0.092	0.0627
40.0	10.2250	33.6363	25.850	214.80	0.103	0.0979
45.0	10.1676	33.6606	25.879	212.17	0.114	0.1072
50.0	10.0594	33.6806	25.913	209.03	0.124	0.1043
60.0	9.7722	33.7429	26.010	200.01	0.145	0.1046
70.0	9.3658	33.8226	26.139	187.91	0.164	0.0999
80.0	9.2969	33.8707	26.188	183.46	0.183	0.1266
90.0	9.2026	33.8930	26.221	180.54	0.201	0.1287
100.0	9.1308	33.9113	26.247	178.26	0.219	0.1314
120.0	9.0053	33.9651	26.309	172.72	0.254	0.1534
140.0	8.8177	33.9814	26.352	169.03	0.288	0.1362
160.0	8.6507	34.0123	26.402	164.58	0.321	0.1341
180.0	8.5042	34.0364	26.444	160.95	0.354	0.1301
200.0	8.3471	34.0587	26.486	157.31	0.386	0.1233
250.0	8.3036	34.1601	26.573	150.01	0.463	0.1960
300.0	7.6737	34.1482	26.657	142.55	0.536	0.0924
350.0	7.4769	34.1944	26.722	137.11	0.606	0.0999
400.0	7.0061	34.1863	26.782	131.87	0.673	0.0271
450.0	6.1771	34.1495	26.863	124.15	0.737	-0.1120
500.0	5.6764	34.1781	26.949	116.22	0.797	-0.1522
550.0	5.5157	34.2228	27.004	111.46	0.854	-0.1368
600.0	5.2960	34.2525	27.054	107.08	0.908	-0.1397
650.0	5.0114	34.2903	27.117	101.30	0.960	-0.1431
700.0	4.8297	34.3271	27.168	96.87	1.010	-0.1349
750.0	4.6998	34.3627	27.211	93.15	1.057	-0.1216
800.0	4.4637	34.3930	27.261	88.54	1.103	-0.1237
850.0	4.3411	34.4107	27.289	86.22	1.146	-0.1231
900.0	4.2278	34.4255	27.313	84.22	1.189	-0.1237
950.0	4.0926	34.4377	27.337	82.14	1.231	-0.1284
1000.0	3.9815	34.4524	27.360	80.15	1.271	-0.1285
1500.0	2.8017	34.5460	27.550	62.79	1.627	-0.1681
2000.0	2.0519	34.6152	27.670	51.20	1.910	-0.1772
2006.0	2.0494	34.6155	27.671	51.17	1.913	-0.1772

**Table A4.** Data listings at selected pressures of temperature ( $^{\circ}\text{C}$ ), salinity (PSS), potential density anomaly,  $\gamma_0$ , ( $\text{kg m}^{-3}$ ), specific volume anomaly,  $\delta$ , ( $10^{-8} \text{ m}^3 \text{ kg}^{-1}$ ), summation of dynamic height,  $\Sigma\Delta D$ , ( $0.1 \text{ m}^2 \text{ s}^{-2}$ ), spiciness,  $\pi$ , and transmissivity (%) for CTD stations occupied during both legs of the 23-30 July 1996 cruise aboard the R/V *Point Sur*.

STATION: 1		DATE: 24-July-1996 0351 UTC						
LAT: 36° 16.4 N		LON: 122° 10.6 W						
P(dbar)	T( $^{\circ}\text{C}$ )	S(PSS)	$\gamma_0$ ( $\text{kg m}^{-3}$ )	$\delta$	$\Sigma\Delta D$	$\pi$	%Trans	
3.0	13.9347	33.7479	25.234	272.60	0.008	0.9032	75.961	
5.0	13.9307	33.7474	25.234	272.61	0.014	0.9019	75.808	
10.0	13.1791	33.7509	25.390	257.90	0.027	0.7484	76.868	
15.0	12.9574	33.7504	25.434	253.86	0.040	0.7027	77.903	
20.0	12.8685	33.7519	25.453	252.19	0.052	0.6859	82.057	
25.0	12.7993	33.7529	25.468	250.95	0.065	0.6726	84.324	
30.0	12.6726	33.7539	25.493	248.63	0.077	0.6480	85.401	
40.0	12.3148	33.7645	25.571	241.49	0.102	0.5855	86.394	
50.0	11.4241	33.7976	25.764	223.33	0.125	0.4414	87.098	
60.0	11.1756	33.8130	25.821	218.10	0.147	0.4074	87.061	
70.0	10.6646	33.8165	25.915	209.35	0.169	0.3176	87.723	
80.0	9.7076	33.8932	26.139	188.23	0.188	0.2124	88.891	
90.0	9.5481	33.9474	26.207	181.89	0.207	0.2285	88.687	
100.0	9.4193	33.9864	26.259	177.17	0.225	0.2378	88.953	
120.0	9.2795	34.0247	26.312	172.53	0.260	0.2449	89.225	
140.0	9.1122	34.0549	26.363	168.08	0.294	0.2412	88.697	
160.0	8.9958	34.0833	26.404	164.55	0.327	0.2446	88.576	
180.0	8.4930	34.0545	26.460	159.44	0.360	0.1427	89.783	
200.0	8.5509	34.1342	26.514	154.75	0.391	0.2142	89.400	
250.0	8.2830	34.2153	26.619	145.62	0.466	0.2364	89.919	
300.0	8.0236	34.2342	26.674	141.24	0.537	0.2116	89.963	
350.0	7.8285	34.2448	26.711	138.43	0.607	0.1904	90.105	
400.0	7.3365	34.2265	26.768	133.51	0.675	0.1047	90.171	
450.0	6.9157	34.2296	26.829	128.14	0.741	0.0483	90.297	
500.0	6.4999	34.2537	26.904	121.38	0.803	0.0112	90.355	
550.0	6.1086	34.2859	26.981	114.43	0.861	-0.0142	90.225	
600.0	5.9313	34.2815	27.000	113.06	0.918	-0.0404	90.307	
650.0	5.4872	34.2865	27.059	107.54	0.974	-0.0909	90.339	
700.0	5.2094	34.3407	27.135	100.57	1.026	-0.0813	90.166	
750.0	4.9125	34.3778	27.199	94.65	1.075	-0.0863	90.161	
800.0	4.7020	34.4008	27.241	90.86	1.121	-0.0919	89.956	
819.0	4.6396	34.4049	27.251	89.98	1.139	-0.0956	89.535	

**STATION: 2**  
**LAT: 36° 12.2 N**

**DATE: 24-July-1996 0543 UTC**  
**LON: 122° 10.5 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$	%Trans
3.0	13.6141	33.7692	25.316	264.75	0.008	0.8527	68.775
5.0	13.5866	33.7711	25.324	264.13	0.013	0.8484	68.515
10.0	13.4907	33.7700	25.342	262.48	0.026	0.8275	68.083
15.0	13.3127	33.7577	25.369	260.08	0.039	0.7809	68.452
20.0	13.0586	33.7751	25.433	254.08	0.052	0.7426	69.180
25.0	12.8410	33.7802	25.481	249.72	0.065	0.7025	70.074
30.0	12.7344	33.7790	25.501	247.93	0.077	0.6801	72.115
40.0	12.2093	33.7813	25.604	238.32	0.102	0.5782	79.162
50.0	11.5196	33.8015	25.750	224.72	0.125	0.4624	85.115
60.0	11.0344	33.7994	25.836	216.68	0.147	0.3709	86.730
70.0	10.3239	33.8249	25.981	203.06	0.168	0.2641	88.365
80.0	9.9812	33.8501	26.059	195.82	0.188	0.2246	89.271
90.0	9.7129	33.8683	26.118	190.36	0.207	0.1934	89.360
100.0	9.4151	33.9104	26.200	182.73	0.226	0.1771	89.502
120.0	9.1500	33.9563	26.279	175.59	0.261	0.1697	89.678
140.0	8.8668	34.0108	26.367	167.59	0.296	0.1672	89.786
160.0	8.5550	34.0447	26.443	160.75	0.329	0.1448	89.920
180.0	8.3341	34.0911	26.513	154.37	0.360	0.1473	87.757
200.0	8.1586	34.1154	26.559	150.34	0.391	0.1395	89.855
250.0	7.7417	34.1740	26.667	140.80	0.463	0.1233	90.174
300.0	7.6575	34.2386	26.731	135.61	0.533	0.1614	89.959
350.0	7.2224	34.2433	26.797	129.90	0.599	0.1027	89.990
400.0	6.8584	34.2462	26.850	125.40	0.663	0.0543	89.969
450.0	6.6304	34.2582	26.890	122.12	0.725	0.0326	90.114
500.0	6.2524	34.2713	26.951	116.76	0.785	-0.0068	90.160
550.0	6.0001	34.2987	27.005	112.05	0.842	-0.0177	90.292
600.0	5.5873	34.2795	27.041	108.75	0.897	-0.0840	90.372
650.0	5.2776	34.3193	27.110	102.45	0.950	-0.0897	90.378
700.0	5.0244	34.3349	27.152	98.68	1.000	-0.1069	90.376
750.0	4.9581	34.3717	27.189	95.67	1.048	-0.0860	90.216
800.0	4.8421	34.3869	27.215	93.62	1.096	-0.0874	90.247
850.0	4.6509	34.4070	27.252	90.27	1.142	-0.0931	89.982
900.0	4.4576	34.4228	27.286	87.21	1.186	-0.1018	89.775
950.0	4.3348	34.4311	27.306	85.56	1.230	-0.1086	89.915
1000.0	4.2567	34.4372	27.320	84.61	1.272	-0.1124	89.707
1023.0	4.1825	34.4446	27.334	83.36	1.292	-0.1144	89.977

**STATION: 3**  
**LAT: 36° 20.0 N**

**DATE: 24-July-1996 0859 UTC**  
**LON: 121° 55.7 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$	%Trans
3.0	12.3169	33.8012	25.598	237.93	0.007	0.6158	74.758
5.0	12.2871	33.7948	25.599	237.91	0.012	0.6049	74.921
10.0	11.1486	33.8204	25.831	215.99	0.023	0.4095	81.208
15.0	10.9845	33.8463	25.881	211.37	0.034	0.3998	82.436
20.0	10.8567	33.8445	25.902	209.45	0.044	0.3751	84.514
25.0	10.8493	33.8485	25.907	209.14	0.055	0.3769	84.337
30.0	10.8043	33.8442	25.911	208.80	0.065	0.3653	84.897
40.0	10.5645	33.8451	25.954	204.93	0.086	0.3230	87.005
49.0	10.3324	33.8672	26.012	199.64	0.104	0.2995	86.816

**STATION: 4**  
**LAT: 36° 20.0 N**

**DATE: 24-July-1996 0941 UTC**  
**LON: 121° 59.4 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$	%Trans
3.0	13.3306	33.7603	25.367	259.93	0.008	0.7869	79.710
5.0	13.3043	33.7575	25.370	259.68	0.013	0.7793	79.681
10.0	13.1376	33.7616	25.407	256.33	0.026	0.7483	78.608
15.0	12.9510	33.7721	25.452	252.14	0.039	0.7186	76.945
20.0	12.6203	33.7810	25.524	245.42	0.051	0.6593	72.932
25.0	12.4308	33.7990	25.575	240.71	0.063	0.6358	70.255
30.0	12.0933	33.7878	25.631	235.50	0.075	0.5612	74.210
40.0	11.0689	33.7849	25.818	217.90	0.098	0.3662	86.729
50.0	10.7003	33.8036	25.899	210.48	0.119	0.3142	86.570
60.0	10.0525	33.8515	26.048	196.46	0.139	0.2383	88.537
70.0	9.8636	33.8768	26.100	191.74	0.159	0.2259	88.500
80.0	9.8021	33.8721	26.106	191.31	0.178	0.2116	88.879
90.0	9.7409	33.8997	26.138	188.49	0.197	0.2229	88.590
100.0	9.4966	33.9533	26.221	180.84	0.215	0.2244	88.190
103.0	9.4630	33.9597	26.231	179.89	0.221	0.2239	88.051

**STATION: 5**  
**LAT: 36° 20.1 N**

**DATE: 24-July-1996 1156 UTC**  
**LON: 122° 2.0 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$	%Trans
3.0	13.4744	33.7554	25.334	263.06	0.008	0.8128	81.140
5.0	13.4683	33.7548	25.335	263.04	0.013	0.8110	81.198
10.0	13.3587	33.7514	25.355	261.30	0.026	0.7855	80.285
15.0	10.8615	33.7682	25.842	215.07	0.038	0.3158	87.731
20.0	10.1737	33.8315	26.011	199.10	0.049	0.2442	88.618
25.0	9.9267	33.8562	26.072	193.38	0.058	0.2212	88.916
30.0	9.9067	33.8611	26.079	192.81	0.068	0.2216	88.908
40.0	9.8365	33.8723	26.100	191.05	0.087	0.2184	88.873
50.0	9.8125	33.8804	26.111	190.26	0.106	0.2206	88.821
60.0	9.7833	33.8886	26.122	189.39	0.125	0.2219	88.638
70.0	9.6919	33.9043	26.150	186.97	0.144	0.2187	88.812
80.0	9.6489	33.9094	26.161	186.11	0.163	0.2154	88.818
90.0	9.6064	33.9156	26.173	185.16	0.181	0.2131	88.900
100.0	9.5923	33.9182	26.177	184.95	0.200	0.2125	88.937
120.0	9.4913	33.9454	26.216	181.72	0.237	0.2169	89.055
140.0	9.1869	34.0067	26.313	172.80	0.272	0.2152	88.403
143.0	9.0846	34.0236	26.343	170.03	0.277	0.2120	88.154

**STATION: 6**           **DATE: 24-July-1996 1226 UTC**  
**LAT: 36° 20.0 N**       **LON: 122° 4.7 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$	%Trans
3.0	13.6780	33.7516	25.290	267.29	0.008	0.8521	81.315
5.0	13.6754	33.7508	25.290	267.35	0.013	0.8509	81.317
10.0	13.6645	33.7515	25.293	267.21	0.027	0.8490	81.305
15.0	13.6535	33.7522	25.296	267.08	0.040	0.8472	81.292
20.0	12.6567	33.7799	25.516	246.24	0.053	0.6662	82.510
25.0	11.5265	33.7833	25.734	225.62	0.065	0.4498	84.823
30.0	11.0925	33.7918	25.819	217.58	0.076	0.3762	85.264
40.0	10.5413	33.8370	25.952	205.14	0.097	0.3125	86.445
50.0	10.2908	33.8497	26.006	200.27	0.117	0.2783	87.203
60.0	10.1403	33.8563	26.037	197.52	0.137	0.2573	87.815
70.0	9.9417	33.8629	26.076	194.03	0.157	0.2282	88.374
80.0	9.7485	33.8881	26.128	189.26	0.176	0.2153	88.713
90.0	9.7154	33.8951	26.139	188.41	0.194	0.2151	88.771
100.0	9.6938	33.9006	26.147	187.86	0.213	0.2155	88.790
120.0	9.5927	33.9222	26.181	185.04	0.251	0.2154	88.686
140.0	9.2419	33.9989	26.298	174.24	0.287	0.2180	88.850
160.0	9.0287	34.0430	26.367	168.04	0.321	0.2181	88.825
180.0	8.9741	34.0768	26.403	165.07	0.354	0.2357	89.037
200.0	8.8549	34.0921	26.434	162.47	0.387	0.2285	89.114
250.0	8.5296	34.1102	26.499	157.09	0.466	0.1912	89.439
269.0	8.3645	34.1634	26.566	151.00	0.495	0.2075	88.168

STATION: 7		DATE: 24-July-1996	1304 UTC				
LAT: 36° 20.0 N		LON: 122° 8.4 W					
P (dbar)	T (°C)	S (PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$	%Trans
3.0	13.7520	33.7520	25.275	268.71	0.008	0.8680	79.417
5.0	13.7520	33.7522	25.275	268.74	0.013	0.8681	79.474
10.0	13.5557	33.7537	25.316	264.95	0.027	0.8282	79.701
15.0	12.8957	33.7417	25.440	253.34	0.040	0.6834	80.869
20.0	12.6940	33.7803	25.509	246.84	0.052	0.6734	74.407
25.0	12.3539	33.7925	25.585	239.78	0.064	0.6156	70.658
30.0	11.4062	33.8095	25.776	221.69	0.076	0.4480	78.812
40.0	10.9235	33.8390	25.886	211.42	0.097	0.3825	82.284
50.0	10.3733	33.8424	25.986	202.17	0.118	0.2869	86.524
60.0	9.9950	33.8623	26.066	194.73	0.138	0.2371	88.171
70.0	9.7705	33.8919	26.127	189.14	0.157	0.2221	88.258
80.0	9.6679	33.9115	26.159	186.25	0.176	0.2202	88.268
90.0	9.6049	33.9344	26.188	183.75	0.195	0.2277	88.372
100.0	9.5310	33.9494	26.212	181.67	0.213	0.2270	88.339
120.0	9.3798	33.9897	26.268	176.69	0.248	0.2336	88.692
140.0	9.1333	34.0418	26.349	169.37	0.283	0.2343	88.887
160.0	8.9171	34.0909	26.422	162.78	0.316	0.2381	88.615
180.0	8.8366	34.1171	26.456	159.98	0.349	0.2457	89.188
200.0	8.6796	34.1066	26.472	158.73	0.381	0.2124	89.346
250.0	8.4597	34.1549	26.545	152.72	0.459	0.2157	89.282
300.0	8.0796	34.1841	26.626	145.78	0.534	0.1804	89.527
350.0	7.7063	34.2000	26.694	139.98	0.605	0.1372	89.502
400.0	7.3044	34.2141	26.763	133.98	0.674	0.0904	89.801
450.0	6.6198	34.2355	26.874	123.65	0.738	0.0134	89.820
500.0	6.2362	34.2547	26.939	117.78	0.798	-0.0221	89.794
550.0	5.7358	34.2382	26.990	113.12	0.856	-0.0981	90.169
600.0	5.6852	34.2727	27.024	110.51	0.912	-0.0776	90.057
650.0	5.4602	34.3102	27.081	105.44	0.965	-0.0755	89.679
671.0	5.2533	34.3345	27.125	101.26	0.987	-0.0808	89.726

**STATION: 8**  
**LAT: 36° 19.9 N**

**DATE: 24-July-1996 1450 UTC**  
**LON: 122° 12.6 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$	%Trans
3.0	13.4532	33.7555	25.339	262.64	0.008	0.8085	77.034
5.0	13.4392	33.7566	25.342	262.34	0.013	0.8064	77.148
10.0	13.3211	33.7600	25.369	259.94	0.026	0.7846	77.009
15.0	13.1903	33.7690	25.402	256.91	0.039	0.7647	73.646
20.0	13.1136	33.7685	25.417	255.60	0.052	0.7486	74.934
25.0	13.0218	33.7671	25.435	254.09	0.065	0.7287	75.656
30.0	12.4573	33.7654	25.544	243.81	0.077	0.6145	84.253
40.0	11.1108	33.8013	25.824	217.41	0.100	0.3868	84.526
50.0	10.7171	33.8142	25.904	209.99	0.121	0.3255	86.510
60.0	9.8985	33.8758	26.093	192.18	0.141	0.2313	88.769
70.0	9.6517	33.9067	26.158	186.15	0.160	0.2139	89.073
80.0	9.5106	33.9339	26.203	182.11	0.178	0.2118	89.166
90.0	9.4170	33.9702	26.247	178.14	0.197	0.2248	89.008
100.0	9.3673	33.9994	26.278	175.39	0.214	0.2396	88.419
120.0	9.2325	34.0380	26.330	170.81	0.249	0.2477	89.117
140.0	9.1532	34.0583	26.359	168.46	0.283	0.2505	89.228
160.0	9.0402	34.0684	26.385	166.34	0.316	0.2400	88.664
180.0	8.9496	34.0844	26.413	164.12	0.349	0.2378	88.359
200.0	8.8356	34.1105	26.451	160.81	0.382	0.2400	88.444
250.0	8.4627	34.1922	26.574	150.01	0.459	0.2456	89.765
300.0	8.2083	34.2234	26.638	144.77	0.533	0.2307	89.925
350.0	7.6653	34.2457	26.736	136.00	0.602	0.1674	90.058
400.0	7.2116	34.2321	26.790	131.34	0.669	0.0916	90.145
450.0	6.7580	34.2356	26.855	125.53	0.734	0.0318	90.251
500.0	6.4032	34.2587	26.921	119.71	0.795	0.0026	90.257
550.0	5.9320	34.2522	26.976	114.61	0.853	-0.0629	90.269
600.0	5.7182	34.2462	26.999	112.90	0.910	-0.0945	90.309
650.0	5.5129	34.2929	27.061	107.40	0.965	-0.0828	90.175
700.0	5.2231	34.3339	27.128	101.25	1.017	-0.0851	90.185
750.0	4.9146	34.3726	27.195	95.06	1.066	-0.0902	89.997
800.0	4.7073	34.3904	27.232	91.69	1.113	-0.0995	89.997
850.0	4.5151	34.4123	27.271	88.21	1.158	-0.1034	89.629
900.0	4.2888	34.4334	27.313	84.37	1.201	-0.1112	89.635
919.0	4.2414	34.4377	27.321	83.65	1.217	-0.1129	87.556

**STATION: 9**  
**LAT: 36° 20.1 N**

**DATE: 24-July-1996 1625 UTC**  
**LON: 122° 15.2 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$	%Trans
3.0	13.6346	33.7543	25.301	266.25	0.008	0.8452	75.804
5.0	13.6327	33.7537	25.301	266.31	0.013	0.8443	75.695
10.0	13.5748	33.7493	25.309	265.63	0.027	0.8286	76.064
15.0	13.4066	33.7501	25.344	262.44	0.040	0.7942	76.882
20.0	13.2520	33.7523	25.377	259.44	0.053	0.7641	78.676
25.0	12.9893	33.7542	25.431	254.43	0.066	0.7119	79.231
30.0	12.8403	33.7545	25.461	251.72	0.078	0.6820	81.099
40.0	12.5809	33.7594	25.516	246.76	0.103	0.6339	85.237
50.0	11.1894	33.7672	25.783	221.52	0.127	0.3741	86.329
60.0	10.8057	33.8125	25.887	211.81	0.148	0.3398	87.294
70.0	10.1802	33.8474	26.023	199.06	0.169	0.2571	88.256
80.0	9.5494	33.9278	26.192	183.17	0.188	0.2134	89.118
90.0	9.4467	33.9707	26.242	178.57	0.206	0.2302	88.697
100.0	9.3618	34.0030	26.281	175.04	0.224	0.2415	88.695
120.0	9.1662	34.0387	26.341	169.73	0.258	0.2375	88.988
140.0	8.9482	34.0830	26.411	163.47	0.292	0.2372	88.217
160.0	8.7958	34.1079	26.455	159.67	0.324	0.2324	88.671
180.0	8.3817	34.1088	26.520	153.76	0.355	0.1685	89.924
200.0	8.3211	34.1843	26.588	147.61	0.385	0.2185	89.690
250.0	8.1310	34.2288	26.653	142.37	0.458	0.2241	89.807
300.0	7.8602	34.2403	26.703	138.40	0.528	0.1923	90.103
350.0	7.5007	34.2385	26.754	134.18	0.596	0.1381	90.132
400.0	7.1121	34.2302	26.802	130.08	0.663	0.0764	90.189
450.0	6.7839	34.2556	26.868	124.40	0.726	0.0510	90.113
500.0	6.3515	34.2516	26.922	119.54	0.787	-0.0097	90.298
550.0	6.0295	34.2763	26.983	114.10	0.846	-0.0317	90.281
600.0	5.5060	34.2705	27.043	108.39	0.901	-0.1008	90.312
650.0	5.3778	34.3161	27.095	103.96	0.955	-0.0805	90.285
700.0	5.1399	34.3472	27.148	99.21	1.006	-0.0841	90.103
750.0	4.9570	34.3708	27.188	95.72	1.054	-0.0867	90.155
800.0	4.6799	34.4030	27.245	90.42	1.101	-0.0925	89.511
850.0	4.4384	34.4213	27.287	86.61	1.145	-0.1045	89.298
900.0	4.2466	34.4352	27.318	83.73	1.188	-0.1142	89.780
950.0	4.1269	34.4468	27.341	81.88	1.230	-0.1177	89.609
993.0	4.0205	34.4582	27.361	80.13	1.265	-0.1199	89.141

**STATION: 10**  
**LAT: 36° 24.3 N**

**DATE: 24-July-1996 1755 UTC**  
**LON: 122° 10.4 W**

P (dbar)	T (°C)	S (PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma \Delta D$	$\pi$	%Trans
3.0	13.8398	33.7516	25.256	270.46	0.008	0.8861	82.450
5.0	13.8236	33.7485	25.257	270.42	0.014	0.8802	82.408
10.0	12.8615	33.7425	25.447	252.51	0.027	0.6774	82.448
15.0	12.6668	33.7632	25.501	247.47	0.039	0.6546	83.845
20.0	12.4289	33.7540	25.541	243.88	0.051	0.6001	85.480
25.0	11.8173	33.7323	25.640	234.52	0.063	0.4645	87.236
30.0	11.3892	33.7834	25.759	223.32	0.075	0.4243	87.712
40.0	10.2134	33.8382	26.010	199.67	0.096	0.2562	88.300
50.0	9.7914	33.8895	26.121	189.25	0.115	0.2242	88.283
60.0	9.7659	33.8940	26.129	188.71	0.134	0.2232	88.272
70.0	9.7404	33.8980	26.137	188.20	0.153	0.2219	88.150
80.0	9.6514	33.9225	26.171	185.17	0.171	0.2262	88.258
90.0	9.5613	33.9399	26.199	182.65	0.190	0.2248	88.328
100.0	9.4412	33.9613	26.236	179.37	0.208	0.2216	88.606
120.0	9.3723	33.9809	26.263	177.22	0.243	0.2254	88.542
140.0	9.1493	34.0267	26.335	170.74	0.278	0.2250	88.621
160.0	9.0800	34.0395	26.356	169.09	0.312	0.2235	88.674
180.0	8.9350	34.0723	26.405	164.80	0.346	0.2259	88.923
200.0	8.8689	34.0669	26.412	164.55	0.379	0.2109	89.220
250.0	8.5322	34.1392	26.522	154.98	0.458	0.2145	89.705
300.0	8.3401	34.1862	26.589	149.48	0.534	0.2213	89.877
350.0	8.0525	34.1984	26.642	145.15	0.608	0.1869	89.954
400.0	7.1677	34.1866	26.760	134.10	0.677	0.0496	90.280
450.0	6.5663	34.1702	26.829	127.78	0.742	-0.0453	90.292
500.0	6.2815	34.1862	26.880	123.46	0.805	-0.0703	90.242
550.0	6.1833	34.2585	26.950	117.45	0.865	-0.0264	89.965
600.0	5.7276	34.2845	27.028	110.19	0.923	-0.0631	89.874
650.0	5.3538	34.3293	27.109	102.67	0.976	-0.0729	89.374
700.0	5.0330	34.3657	27.175	96.51	1.026	-0.0818	89.494
750.0	4.8722	34.3846	27.209	93.64	1.073	-0.0854	89.450
800.0	4.7088	34.4007	27.240	90.95	1.119	-0.0912	89.447
850.0	4.5656	34.4121	27.266	88.84	1.164	-0.0982	88.339
861.0	4.5319	34.4138	27.271	88.41	1.174	-0.1006	88.301

**STATION: 11**  
**LAT: 36° 28.2 N**

**DATE: 24-July-1996 1920 UTC**  
**LON: 122° 10.4 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$	%Trans
3.0	13.4994	33.6722	25.265	269.66	0.008	0.7524	81.770
5.0	13.4664	33.6649	25.266	269.61	0.013	0.7398	81.788
10.0	11.7361	33.6012	25.552	242.47	0.026	0.3462	85.480
15.0	11.4339	33.7601	25.732	225.49	0.038	0.4144	84.084
20.0	10.4492	33.8448	25.974	202.62	0.049	0.3029	87.996
25.0	10.1691	33.8467	26.024	198.00	0.059	0.2553	88.069
30.0	10.0087	33.8734	26.072	193.53	0.068	0.2487	88.232
40.0	9.7388	33.9095	26.145	186.74	0.087	0.2313	88.236
50.0	9.6726	33.9207	26.165	185.06	0.106	0.2288	88.259
60.0	9.5933	33.9382	26.192	182.70	0.124	0.2293	88.286
70.0	9.5203	33.9477	26.212	181.04	0.143	0.2245	88.387
80.0	9.4486	33.9562	26.230	179.49	0.161	0.2191	88.553
90.0	9.4043	33.9589	26.240	178.78	0.178	0.2138	88.773
100.0	9.2696	33.9716	26.272	175.93	0.196	0.2016	88.887
120.0	9.2705	34.0107	26.303	173.43	0.231	0.2323	88.951
140.0	9.1715	34.0395	26.341	170.13	0.266	0.2387	89.132
160.0	9.0711	34.0640	26.377	167.14	0.299	0.2415	89.135
180.0	8.7658	34.0775	26.436	161.83	0.332	0.2033	89.207
200.0	8.7454	34.0802	26.442	161.69	0.364	0.2019	89.189
250.0	8.6274	34.1298	26.500	157.11	0.444	0.2218	89.449
300.0	8.2526	34.1692	26.588	149.44	0.521	0.1946	89.644
350.0	7.9198	34.1952	26.659	143.44	0.595	0.1647	89.717
400.0	7.3883	34.1881	26.731	137.09	0.665	0.0817	90.033
450.0	6.7307	34.1782	26.814	129.41	0.732	-0.0171	90.157
500.0	6.2666	34.2204	26.908	120.73	0.794	-0.0452	90.204
550.0	6.1803	34.2675	26.957	116.74	0.854	-0.0196	90.076
600.0	5.7945	34.2915	27.025	110.54	0.910	-0.0494	90.018
650.0	5.5535	34.3109	27.070	106.58	0.965	-0.0638	89.996
700.0	5.2285	34.3203	27.117	102.32	1.017	-0.0951	89.377
750.0	4.9048	34.3540	27.181	96.31	1.066	-0.1058	89.963
800.0	4.7670	34.3764	27.215	93.46	1.114	-0.1039	89.217
850.0	4.5310	34.4031	27.262	89.09	1.159	-0.1090	89.360
900.0	4.3601	34.4243	27.298	85.91	1.203	-0.1109	89.082
950.0	4.2002	34.4386	27.326	83.37	1.245	-0.1167	89.245
1000.0	4.0252	34.4530	27.356	80.63	1.286	-0.1236	89.424
1285.0	3.1607	34.5216	27.497	67.47	1.498	-0.1543	88.203

**STATION: 12**  
**LAT: 36° 20.0 N**

**DATE: 25-July-1996 0328 UTC**  
**LON: 122° 18.8 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$	%Trans
3.0	13.7062	33.7567	25.288	267.47	0.008	0.8621	71.830
5.0	13.7062	33.7572	25.288	267.48	0.013	0.8624	71.903
10.0	13.6433	33.7589	25.303	266.26	0.027	0.8505	71.690
15.0	13.4670	33.7582	25.338	263.01	0.040	0.8131	70.572
20.0	13.1708	33.7679	25.405	256.75	0.053	0.7597	69.270
25.0	12.9353	33.7693	25.454	252.29	0.066	0.7129	68.237
30.0	12.8289	33.7794	25.483	249.67	0.078	0.6993	67.208
40.0	12.0767	33.7640	25.616	237.20	0.103	0.5391	80.928
50.0	11.3974	33.8115	25.780	221.84	0.125	0.4474	87.341
60.0	10.5803	33.8263	25.937	207.01	0.147	0.3106	87.976
70.0	10.1603	33.8379	26.019	199.42	0.167	0.2460	88.245
80.0	9.9431	33.8456	26.062	195.53	0.187	0.2146	89.027
90.0	9.6866	33.8763	26.129	189.35	0.206	0.1953	89.163
100.0	9.3603	33.9171	26.214	181.39	0.225	0.1733	89.417
120.0	8.9790	33.9701	26.317	171.95	0.260	0.1532	89.559
140.0	8.8368	34.0183	26.378	166.58	0.294	0.1684	89.639
160.0	8.5559	34.0646	26.458	159.28	0.327	0.1606	89.578
180.0	8.4745	34.0962	26.496	156.07	0.358	0.1728	89.728
200.0	8.3221	34.1250	26.542	152.03	0.389	0.1718	89.885
250.0	8.0280	34.1578	26.612	146.13	0.463	0.1527	90.127
300.0	7.8807	34.2381	26.698	138.87	0.534	0.1936	90.027
350.0	7.3308	34.2278	26.769	132.57	0.602	0.1056	90.107
400.0	6.9125	34.2276	26.828	127.52	0.667	0.0469	90.068
450.0	6.5389	34.2367	26.885	122.48	0.729	0.0036	90.192
500.0	6.1202	34.2330	26.937	117.86	0.790	-0.0538	90.234
550.0	6.0731	34.2742	26.976	114.83	0.848	-0.0280	90.184
600.0	5.5768	34.2831	27.045	108.35	0.903	-0.0824	90.202
650.0	5.2845	34.2978	27.092	104.14	0.957	-0.1059	90.209
700.0	5.0666	34.3208	27.136	100.26	1.008	-0.1133	90.171
750.0	4.7599	34.3822	27.220	92.44	1.056	-0.0997	89.889
800.0	4.4510	34.4126	27.278	86.93	1.101	-0.1096	89.630
850.0	4.3177	34.4249	27.302	84.88	1.144	-0.1144	89.462
900.0	4.2474	34.4315	27.315	84.01	1.186	-0.1169	89.658
950.0	4.1680	34.4385	27.330	82.99	1.228	-0.1201	89.409
973.0	4.1602	34.4400	27.332	82.99	1.247	-0.1199	89.367

**STATION: 13**  
**LAT: 36° 20.0 N**

**DATE: 25-July-1996 0432 UTC**  
**LON: 122° 21.6 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma \Delta D$	$\pi$	%Trans
3.0	13.8436	33.7542	25.258	270.34	0.008	0.8890	75.704
5.0	13.8426	33.7541	25.258	270.38	0.014	0.8886	75.749
10.0	13.8303	33.7519	25.259	270.43	0.027	0.8842	75.688
15.0	13.5704	33.7491	25.310	265.69	0.040	0.8274	74.648
20.0	13.1655	33.7147	25.365	260.55	0.054	0.7167	79.809
25.0	12.9214	33.7598	25.449	252.73	0.066	0.7026	82.227
30.0	12.8561	33.7509	25.455	252.28	0.079	0.6823	83.355
40.0	12.7902	33.7532	25.470	251.12	0.104	0.6706	84.273
50.0	12.1380	33.7615	25.603	238.72	0.129	0.5485	87.184
60.0	11.6491	33.7924	25.719	227.89	0.152	0.4793	87.312
70.0	11.2274	33.7960	25.799	220.47	0.174	0.4033	87.180
80.0	10.8624	33.8087	25.875	213.48	0.196	0.3467	87.322
90.0	9.9060	33.8740	26.091	193.03	0.216	0.2306	88.518
100.0	9.6948	33.9041	26.150	187.62	0.235	0.2185	88.581
120.0	9.0613	33.9490	26.288	174.78	0.272	0.1496	89.549
140.0	8.8579	34.0074	26.366	167.71	0.306	0.1630	89.641
160.0	8.6926	34.0447	26.421	162.80	0.339	0.1662	89.762
180.0	8.4473	34.0591	26.471	158.42	0.371	0.1392	89.760
200.0	8.2673	34.0962	26.527	153.36	0.402	0.1408	89.937
250.0	7.9983	34.1700	26.626	144.79	0.477	0.1579	90.129
300.0	7.8081	34.2214	26.695	139.05	0.548	0.1697	89.955
350.0	7.4978	34.2404	26.756	134.00	0.616	0.1392	89.960
400.0	6.8795	34.2330	26.836	126.67	0.681	0.0468	90.186
450.0	6.5489	34.2459	26.891	121.93	0.744	0.0122	90.243
500.0	6.2376	34.2705	26.952	116.62	0.803	-0.0093	90.142
550.0	5.8097	34.2639	27.001	112.16	0.860	-0.0687	90.218
600.0	5.6210	34.2899	27.045	108.41	0.916	-0.0717	90.228
650.0	5.1881	34.3149	27.117	101.66	0.968	-0.1035	90.273
700.0	4.9461	34.3611	27.181	95.77	1.017	-0.0952	90.195
750.0	4.6887	34.3880	27.232	91.14	1.064	-0.1029	89.850
800.0	4.5034	34.4085	27.269	87.87	1.109	-0.1073	89.531
850.0	4.3483	34.4230	27.298	85.39	1.152	-0.1127	89.667
900.0	4.2215	34.4334	27.320	83.56	1.195	-0.1181	89.680
950.0	4.0184	34.4529	27.356	80.13	1.236	-0.1240	89.630
1000.0	3.8276	34.4678	27.388	77.18	1.275	-0.1316	89.747
1237.0	3.1043	34.5233	27.503	66.37	1.445	-0.1576	88.541

**STATION: 14**  
**LAT: 36° 18.0 N**

**DATE: 25-July-1996 0623 UTC**  
**LON: 122° 23.7 W**

P (dbar)	T (°C)	S (PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$	%Trans
3.0	13.7802	33.7533	25.270	269.16	0.008	0.8749	77.107
5.0	13.7801	33.7532	25.270	269.22	0.013	0.8748	77.134
10.0	13.7745	33.7516	25.270	269.36	0.027	0.8722	77.306
15.0	13.7548	33.7506	25.273	269.18	0.040	0.8671	77.865
20.0	13.3836	33.7401	25.341	262.87	0.054	0.7815	82.978
25.0	12.8518	33.7654	25.467	251.01	0.067	0.6930	84.691
30.0	12.6458	33.7646	25.507	247.34	0.079	0.6511	86.012
40.0	12.0024	33.7773	25.641	234.87	0.103	0.5351	87.363
50.0	11.6609	33.7906	25.715	228.01	0.126	0.4803	87.100
60.0	10.9284	33.8024	25.858	214.64	0.149	0.3540	87.453
70.0	10.2214	33.8315	26.004	200.89	0.169	0.2515	88.087
80.0	9.5554	33.8797	26.153	186.83	0.189	0.1763	89.065
90.0	9.2197	33.9253	26.243	178.41	0.207	0.1570	89.165
100.0	9.1031	33.9483	26.280	175.09	0.225	0.1562	89.301
120.0	8.9202	33.9875	26.340	169.76	0.259	0.1576	89.383
140.0	8.6431	34.0337	26.420	162.52	0.293	0.1501	89.448
160.0	8.4713	34.0699	26.475	157.63	0.325	0.1518	89.654
180.0	8.3149	34.1033	26.525	153.18	0.356	0.1540	89.810
200.0	8.1574	34.1387	26.577	148.59	0.386	0.1578	89.999
250.0	7.7484	34.1880	26.677	139.85	0.458	0.1354	90.100
300.0	7.6046	34.2428	26.741	134.55	0.527	0.1571	89.982
350.0	6.7644	34.1706	26.802	129.02	0.593	-0.0174	90.192
400.0	6.7404	34.2303	26.853	124.97	0.657	0.0259	90.216
450.0	6.3390	34.2432	26.917	119.32	0.718	-0.0173	90.213
500.0	6.1874	34.2785	26.965	115.36	0.776	-0.0094	90.178
550.0	5.8252	34.2917	27.021	110.29	0.833	-0.0449	90.239
600.0	5.4023	34.2963	27.076	105.16	0.887	-0.0927	90.269
650.0	5.2618	34.3217	27.113	102.08	0.938	-0.0897	90.225
700.0	5.0468	34.3401	27.153	98.58	0.989	-0.1003	90.116
750.0	4.7330	34.3619	27.206	93.62	1.037	-0.1187	90.175
800.0	4.5022	34.3755	27.243	90.30	1.083	-0.1334	90.211
850.0	4.4086	34.3958	27.270	88.14	1.127	-0.1278	90.245
900.0	4.3170	34.4262	27.304	85.25	1.171	-0.1139	90.041
950.0	4.1663	34.4396	27.331	82.89	1.213	-0.1194	89.805
1000.0	3.9989	34.4543	27.360	80.22	1.253	-0.1252	89.841
1457.0	2.8404	34.5468	27.547	62.93	1.579	-0.1638	88.996

**STATION: 15**  
**LAT: 36° 22.6 N**

**DATE: 25-July-1996 0815 UTC**  
**LON: 122° 28.1 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_e$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma \Delta D$	$\pi$	%Trans
3.0	14.5442	33.5858	24.981	296.70	0.009	0.9066	85.973
5.0	14.5442	33.5858	24.981	296.76	0.015	0.9066	85.989
10.0	14.5270	33.5827	24.982	296.76	0.030	0.9003	86.049
15.0	14.1514	33.5694	25.051	290.33	0.044	0.8085	86.129
20.0	13.7628	33.6033	25.158	280.29	0.059	0.7527	86.156
25.0	13.3196	33.6119	25.255	271.19	0.072	0.6671	84.822
30.0	13.0658	33.5981	25.295	267.49	0.086	0.6042	85.415
40.0	12.5826	33.6194	25.407	257.10	0.112	0.5237	85.264
50.0	11.9748	33.6413	25.540	244.63	0.137	0.4221	85.484
60.0	10.8328	33.6047	25.720	227.64	0.161	0.1801	88.281
70.0	10.4312	33.6310	25.811	219.19	0.183	0.1292	89.233
80.0	10.2835	33.8043	25.972	204.13	0.204	0.2405	88.271
90.0	9.8491	33.8281	26.064	195.51	0.224	0.1846	89.007
100.0	9.5340	33.8493	26.133	189.13	0.243	0.1483	89.175
120.0	9.2568	33.9174	26.232	180.13	0.280	0.1563	89.407
140.0	8.8258	34.0023	26.367	167.59	0.315	0.1540	89.571
160.0	8.4618	34.0466	26.458	159.22	0.347	0.1319	89.770
180.0	8.3460	34.0828	26.505	155.16	0.379	0.1425	89.819
200.0	8.1697	34.1131	26.555	150.67	0.409	0.1393	89.921
250.0	7.4991	34.1119	26.653	141.97	0.482	0.0394	90.108
300.0	7.2140	34.1461	26.721	136.23	0.552	0.0255	90.169
350.0	6.7290	34.1415	26.784	130.70	0.619	-0.0451	90.246
400.0	6.7354	34.2127	26.840	126.21	0.683	0.0113	90.234
450.0	6.5135	34.2445	26.895	121.55	0.745	0.0065	90.138
500.0	6.3014	34.2776	26.949	116.94	0.804	0.0044	90.189
550.0	5.8249	34.2614	26.997	112.54	0.862	-0.0689	90.122
600.0	5.5157	34.2848	27.054	107.45	0.917	-0.0884	90.219
650.0	5.1853	34.3050	27.109	102.36	0.969	-0.1117	90.208
700.0	4.9794	34.3345	27.157	98.16	1.019	-0.1124	90.205
750.0	4.7736	34.3664	27.206	93.77	1.067	-0.1106	90.083
800.0	4.5938	34.3948	27.248	89.98	1.113	-0.1083	89.982
850.0	4.4682	34.4106	27.275	87.76	1.157	-0.1098	89.738
900.0	4.3717	34.4199	27.293	86.38	1.201	-0.1131	89.711
950.0	4.2512	34.4297	27.314	84.64	1.243	-0.1184	89.579
1000.0	4.0641	34.4487	27.349	81.42	1.285	-0.1231	89.908
1500.0	2.8850	34.5417	27.539	64.10	1.644	-0.1643	89.895
2000.0	2.0620	34.6124	27.667	51.53	1.931	-0.1786	90.081
2301.0	1.8964	34.6323	27.698	49.21	2.082	-0.1772	87.316

**STATION: 16**  
**LAT: 36° 27.2 N**

**DATE: 25-July-1996 1035 UTC**  
**LON: 122° 32.6 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$	%Trans
3.0	14.4031	33.5354	24.972	297.55	0.009	0.8363	86.321
5.0	14.4056	33.5357	24.971	297.63	0.015	0.8370	86.324
10.0	14.3853	33.5348	24.975	297.42	0.030	0.8318	86.378
15.0	14.2976	33.5391	24.997	295.48	0.045	0.8161	86.308
20.0	13.8251	33.5527	25.106	285.24	0.059	0.7260	86.489
25.0	13.3762	33.5825	25.221	274.44	0.073	0.6556	86.685
30.0	13.2171	33.5992	25.266	270.29	0.087	0.6359	86.815
40.0	13.0504	33.6082	25.306	266.70	0.114	0.6087	87.356
50.0	12.7280	33.6094	25.371	260.79	0.140	0.5445	88.221
60.0	11.9914	33.5846	25.493	249.35	0.165	0.3803	88.268
70.0	10.4151	33.5864	25.779	222.22	0.189	0.0910	89.072
80.0	10.1700	33.6028	25.834	217.19	0.211	0.0610	89.094
90.0	9.9351	33.6683	25.925	208.74	0.232	0.0724	89.495
100.0	9.8327	33.8265	26.066	195.56	0.252	0.1803	89.308
120.0	9.1425	33.8678	26.211	182.04	0.290	0.0985	89.697
140.0	9.0932	34.0040	26.326	171.55	0.325	0.1979	89.583
160.0	8.8237	34.0641	26.416	163.34	0.359	0.2022	89.646
180.0	8.6406	34.0955	26.469	158.61	0.391	0.1979	89.743
200.0	8.0557	34.0556	26.527	153.28	0.422	0.0769	89.924
250.0	7.8825	34.1679	26.642	143.28	0.496	0.1391	89.908
300.0	7.1407	34.1042	26.698	138.34	0.567	-0.0179	89.729
350.0	6.8665	34.1369	26.762	132.90	0.634	-0.0303	90.149
400.0	6.6528	34.1716	26.818	128.14	0.700	-0.0321	90.207
450.0	6.4905	34.2201	26.879	123.05	0.762	-0.0158	90.195
500.0	6.1162	34.2676	26.965	115.24	0.822	-0.0271	90.038
550.0	5.5617	34.2574	27.026	109.48	0.878	-0.1040	90.188
600.0	5.4453	34.2880	27.065	106.32	0.932	-0.0942	90.186
650.0	5.2411	34.3165	27.112	102.20	0.984	-0.0962	90.169
700.0	4.8809	34.3247	27.160	97.68	1.034	-0.1312	90.226
750.0	4.6811	34.3445	27.198	94.27	1.082	-0.1380	90.192
800.0	4.5318	34.3720	27.237	90.92	1.128	-0.1329	90.198
850.0	4.4342	34.3922	27.264	88.72	1.173	-0.1279	90.228
900.0	4.2971	34.4097	27.293	86.23	1.217	-0.1289	90.190
950.0	4.1728	34.4278	27.321	83.84	1.260	-0.1280	90.197
1000.0	4.0704	34.4422	27.343	81.98	1.301	-0.1275	90.105
1500.0	2.8886	34.5408	27.538	64.20	1.661	-0.1647	89.921
2000.0	2.0975	34.6058	27.659	52.45	1.951	-0.1811	90.037
2500.0	1.7991	34.6433	27.715	47.88	2.198	-0.1768	90.226
3000.0	1.6394	34.6624	27.745	46.00	2.432	-0.1764	89.623
3021.0	1.6332	34.6637	27.747	45.88	2.441	-0.1759	89.541

**STATION: 17**  
**LAT: 36° 31.9 N**

**DATE: 25-July-1996 1303 UTC**  
**LON: 122° 36.9 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$	%Trans
3.0	14.6260	33.5509	24.936	300.93	0.009	0.8970	86.281
5.0	14.6278	33.5515	24.936	300.97	0.015	0.8978	86.297
10.0	14.6171	33.5507	24.938	300.95	0.030	0.8947	86.369
15.0	14.5985	33.5473	24.940	300.95	0.045	0.8878	86.394
20.0	14.3286	33.5937	25.033	292.22	0.060	0.8656	86.406
25.0	14.0387	33.6125	25.108	285.18	0.074	0.8181	86.142
30.0	13.4392	33.5919	25.216	275.10	0.088	0.6759	85.755
40.0	12.8421	33.6292	25.364	261.23	0.115	0.5832	86.898
50.0	12.3482	33.6800	25.499	248.56	0.141	0.5251	88.154
60.0	10.7823	33.5638	25.698	229.81	0.165	0.1386	88.572
70.0	10.1487	33.6319	25.860	214.49	0.187	0.0806	89.057
80.0	9.9536	33.7282	25.969	204.40	0.208	0.1234	89.333
90.0	9.5070	33.7802	26.083	193.64	0.228	0.0893	89.510
100.0	9.3035	33.8283	26.154	187.09	0.247	0.0937	89.596
120.0	8.8413	33.8910	26.277	175.73	0.283	0.0687	89.776
140.0	8.4469	33.9521	26.386	165.66	0.317	0.0552	89.844
160.0	8.0668	33.9645	26.453	159.54	0.349	0.0070	89.845
180.0	8.0143	34.0137	26.500	155.46	0.381	0.0379	89.937
200.0	7.9988	34.0759	26.551	150.95	0.411	0.0844	89.982
250.0	7.9683	34.1970	26.652	142.35	0.485	0.1748	89.966
300.0	7.0115	34.1091	26.719	136.20	0.554	-0.0318	90.196
350.0	6.9943	34.1782	26.777	131.57	0.621	0.0198	90.251
400.0	6.5911	34.2084	26.856	124.58	0.685	-0.0112	90.161
450.0	6.3994	34.2510	26.915	119.55	0.746	-0.0034	90.203
500.0	6.1014	34.2698	26.968	114.89	0.805	-0.0273	90.146
550.0	5.6419	34.2508	27.011	110.99	0.861	-0.0996	90.177
600.0	5.4580	34.2888	27.064	106.41	0.915	-0.0920	90.150
650.0	5.1047	34.2890	27.106	102.54	0.968	-0.1335	90.191
700.0	4.8549	34.3210	27.160	97.63	1.018	-0.1369	90.176
750.0	4.7111	34.3436	27.194	94.71	1.066	-0.1355	90.163
800.0	4.5641	34.3668	27.229	91.69	1.112	-0.1336	90.175
850.0	4.4731	34.4009	27.267	88.54	1.157	-0.1169	89.950
900.0	4.3732	34.4259	27.298	85.95	1.201	-0.1083	89.869
950.0	4.2034	34.4397	27.327	83.33	1.243	-0.1155	89.937
1000.0	4.0156	34.4553	27.359	80.35	1.284	-0.1228	89.859
1500.0	2.8212	34.5477	27.550	62.90	1.638	-0.1651	90.211
2000.0	2.1014	34.6090	27.661	52.26	1.922	-0.1783	90.203
2500.0	1.7827	34.6485	27.720	47.29	2.169	-0.1740	90.110
2707.0	1.6861	34.6601	27.738	45.87	2.265	-0.1730	90.211

**STATION: 18**  
**LAT: 36° 36.5 N**

**DATE: 25-July-1996 1526 UTC**  
**LON: 122° 41.7 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$	%Trans
3.0	14.6539	33.5874	24.958	298.81	0.009	0.9318	86.549
5.0	14.6545	33.5876	24.959	298.86	0.015	0.9321	86.739
10.0	14.6542	33.5872	24.958	299.03	0.030	0.9315	86.757
15.0	14.6530	33.5869	24.959	299.15	0.045	0.9309	86.729
20.0	14.5539	33.5854	24.979	297.39	0.060	0.9079	86.681
25.0	13.9107	33.5722	25.104	285.61	0.074	0.7592	86.000
30.0	12.0231	33.6084	25.505	247.47	0.088	0.4059	86.449
40.0	10.8320	33.5826	25.703	228.83	0.111	0.1629	87.932
50.0	10.0980	33.6007	25.844	215.58	0.134	0.0475	89.076
60.0	9.9366	33.6535	25.913	209.26	0.155	0.0616	89.314
70.0	10.0890	33.7878	25.992	201.97	0.176	0.1940	89.402
80.0	9.3728	33.7382	26.072	194.47	0.195	0.0340	89.451
90.0	9.3836	33.8247	26.138	188.41	0.215	0.1042	89.516
100.0	8.9528	33.8530	26.229	179.88	0.233	0.0566	89.588
120.0	8.6409	33.9099	26.323	171.32	0.268	0.0521	89.712
140.0	8.3351	33.9588	26.408	163.52	0.301	0.0433	89.889
160.0	8.0519	33.9724	26.462	158.74	0.334	0.0111	89.950
180.0	7.8463	33.9994	26.513	154.12	0.365	0.0017	89.988
200.0	7.7752	34.0305	26.549	151.12	0.395	0.0156	89.854
250.0	7.2592	34.0553	26.642	142.85	0.469	-0.0394	90.078
300.0	6.9747	34.1143	26.729	135.32	0.539	-0.0327	90.071
350.0	6.7291	34.1377	26.781	130.98	0.605	-0.0481	90.215
400.0	6.6891	34.2373	26.865	123.76	0.669	0.0245	90.115
450.0	6.3973	34.2511	26.915	119.51	0.730	-0.0035	90.164
500.0	5.9383	34.2244	26.953	116.13	0.789	-0.0834	90.172
550.0	5.6489	34.2532	27.012	110.90	0.846	-0.0968	90.129
600.0	5.3048	34.2602	27.059	106.62	0.900	-0.1326	90.137
650.0	5.1217	34.2898	27.104	102.69	0.952	-0.1309	90.098
700.0	4.8587	34.3230	27.161	97.53	1.002	-0.1350	90.124
750.0	4.8519	34.3665	27.197	94.73	1.050	-0.1019	89.979
800.0	4.7181	34.3948	27.235	91.50	1.097	-0.0948	89.586
850.0	4.5076	34.4105	27.271	88.25	1.141	-0.1057	89.661
900.0	4.3099	34.4229	27.302	85.40	1.185	-0.1172	89.768
950.0	4.1039	34.4360	27.334	82.41	1.227	-0.1286	89.568
1000.0	3.9850	34.4543	27.362	80.05	1.267	-0.1266	89.965
1500.0	2.7988	34.5513	27.554	62.36	1.617	-0.1641	90.113
2000.0	2.0628	34.6089	27.664	51.79	1.900	-0.1813	90.176
2500.0	1.7873	34.6495	27.721	47.28	2.146	-0.1729	90.111
2843.0	1.6615	34.6644	27.744	45.67	2.306	-0.1723	89.679

**STATION: 19**  
**LAT: 36° 41.6 N**

**DATE: 25-July-1996 1739 UTC**  
**LON: 122° 45.8 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$	%Trans
3.0	14.5644	33.5910	24.980	296.73	0.009	0.9151	85.949
5.0	14.5622	33.5908	24.981	296.75	0.015	0.9144	85.966
10.0	14.5590	33.5911	24.982	296.80	0.030	0.9139	85.965
15.0	14.5305	33.5888	24.986	296.52	0.045	0.9056	85.915
20.0	13.9130	33.5982	25.123	283.62	0.059	0.7803	86.085
25.0	13.7283	33.6043	25.166	279.67	0.073	0.7461	86.081
30.0	13.0643	33.5253	25.238	272.90	0.087	0.5471	86.063
40.0	10.6993	33.4921	25.656	233.30	0.112	0.0671	88.174
50.0	10.3785	33.5821	25.782	221.53	0.135	0.0815	88.864
60.0	10.2957	33.6483	25.848	215.47	0.156	0.1193	89.072
70.0	9.8642	33.6950	25.957	205.23	0.177	0.0820	89.372
80.0	9.6051	33.7824	26.069	194.83	0.197	0.1075	89.383
90.0	9.2636	33.8082	26.145	187.77	0.216	0.0714	89.663
100.0	8.9810	33.8354	26.211	181.61	0.235	0.0472	89.779
120.0	8.7289	33.9018	26.303	173.24	0.270	0.0595	89.813
140.0	8.3302	33.9695	26.418	162.65	0.304	0.0511	89.894
160.0	8.0778	34.0013	26.481	156.96	0.336	0.0378	89.930
180.0	7.9047	34.0191	26.520	153.49	0.367	0.0258	89.985
200.0	7.7625	34.0429	26.560	150.02	0.397	0.0235	89.997
250.0	7.3987	34.0695	26.634	143.73	0.471	-0.0085	90.123
300.0	7.1214	34.1161	26.710	137.18	0.541	-0.0111	90.173
350.0	6.8485	34.1712	26.791	130.11	0.608	-0.0056	90.108
400.0	6.8577	34.2356	26.841	126.17	0.672	0.0459	90.113
450.0	6.4316	34.2329	26.896	121.32	0.734	-0.0134	90.122
500.0	5.9345	34.2139	26.945	116.86	0.793	-0.0923	90.001
550.0	5.5791	34.2353	27.006	111.34	0.851	-0.1193	90.090
600.0	5.4052	34.2733	27.058	106.90	0.905	-0.1105	90.076
650.0	5.3551	34.3214	27.102	103.27	0.957	-0.0790	89.540
700.0	5.1250	34.3480	27.151	98.97	1.008	-0.0852	89.719
750.0	4.8837	34.3691	27.195	94.93	1.056	-0.0963	89.757
800.0	4.6269	34.3913	27.242	90.64	1.103	-0.1075	89.642
850.0	4.4398	34.4066	27.275	87.71	1.147	-0.1159	89.681
900.0	4.2737	34.4269	27.309	84.67	1.190	-0.1178	89.941
950.0	4.1014	34.4384	27.336	82.19	1.232	-0.1270	89.789
1000.0	3.9616	34.4522	27.362	79.93	1.272	-0.1306	89.828
1035.0	3.8464	34.4627	27.382	78.07	1.300	-0.1341	90.022

STATION: 20 DATE: 25-July-1996 1905 UTC  
 LAT: 36° 45.5 N LON: 122° 50.3 W

P (dbar)	T (°C)	S (PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$	%Trans
3.0	14.7621	33.6101	24.953	299.36	0.009	0.9734	85.964
5.0	14.7618	33.6106	24.953	299.37	0.015	0.9737	86.022
10.0	14.7442	33.6098	24.957	299.20	0.030	0.9690	86.002
15.0	14.2505	33.6725	25.110	284.74	0.045	0.9109	85.995
20.0	12.5353	33.5805	25.384	258.75	0.058	0.4854	85.549
25.0	11.3482	33.5363	25.574	240.76	0.071	0.2210	86.640
30.0	11.0843	33.6212	25.688	230.05	0.082	0.2396	87.673
40.0	10.6530	33.6648	25.799	219.74	0.105	0.1960	88.154
50.0	9.8074	33.6484	25.930	207.38	0.126	0.0357	89.171
60.0	9.8785	33.7843	26.025	198.63	0.146	0.1554	89.231
70.0	9.5948	33.8138	26.095	192.15	0.166	0.1308	89.508
80.0	9.3212	33.8563	26.173	184.91	0.185	0.1191	89.502
90.0	9.3879	33.9384	26.227	180.04	0.203	0.1949	89.415
100.0	9.2450	33.9705	26.275	175.63	0.221	0.1967	89.525
120.0	8.9781	34.0446	26.376	166.41	0.255	0.2120	89.546
140.0	8.6542	34.0497	26.431	161.50	0.288	0.1645	89.653
160.0	8.4403	34.0662	26.477	157.44	0.320	0.1441	89.826
180.0	8.3549	34.1125	26.527	153.09	0.351	0.1673	89.833
200.0	8.2083	34.1232	26.557	150.48	0.381	0.1532	89.917
250.0	7.9939	34.1898	26.642	143.26	0.454	0.1729	89.917
300.0	7.6395	34.1976	26.701	138.39	0.525	0.1265	90.035
350.0	7.1341	34.1953	26.771	132.23	0.592	0.0525	89.701
400.0	6.8598	34.2181	26.827	127.50	0.657	0.0324	89.857
450.0	6.2967	34.2064	26.893	121.50	0.719	-0.0518	90.083
500.0	5.7916	34.1982	26.951	116.19	0.779	-0.1223	90.025
550.0	5.6672	34.2572	27.013	110.83	0.836	-0.0914	90.058
600.0	5.4915	34.3003	27.069	105.99	0.890	-0.0791	89.874
650.0	5.3235	34.3286	27.112	102.34	0.942	-0.0770	89.554
700.0	5.0827	34.3548	27.161	97.93	0.992	-0.0847	89.728
750.0	4.8025	34.3791	27.212	93.20	1.040	-0.0975	89.868
800.0	4.6059	34.3779	27.234	91.38	1.086	-0.1203	89.946
850.0	4.5001	34.4149	27.275	87.83	1.131	-0.1030	89.980
900.0	4.2712	34.4288	27.311	84.50	1.174	-0.1166	90.007
950.0	4.1230	34.4451	27.340	81.96	1.216	-0.1195	89.932
1000.0	3.9798	34.4533	27.361	80.07	1.256	-0.1279	90.016
1500.0	2.7635	34.5515	27.558	61.94	1.611	-0.1670	90.094
2000.0	2.1730	34.6031	27.651	53.57	1.898	-0.1775	90.044
2500.0	1.8264	34.6433	27.713	48.24	2.148	-0.1749	89.714
2521.0	1.8068	34.6441	27.715	48.00	2.158	-0.1758	89.208

STATION: 21  
LAT: 36° 50.0 N

DATE: 25-July-1996 2117 UTC  
LON: 122° 54.7 W

P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$	%Trans
3.0	13.8768	33.7124	25.218	274.07	0.008	0.8631	75.616
5.0	13.8722	33.7123	25.219	274.04	0.014	0.8620	75.907
10.0	13.2603	33.7192	25.349	261.81	0.027	0.7403	76.512
15.0	11.9493	33.7507	25.629	235.29	0.040	0.5045	81.724
20.0	11.5464	33.7787	25.726	226.19	0.051	0.4501	84.341
25.0	11.4632	33.8183	25.772	221.92	0.062	0.4657	84.019
30.0	11.2509	33.8469	25.833	216.23	0.073	0.4488	78.950
40.0	10.8561	33.8593	25.914	208.78	0.094	0.3863	82.499
50.0	10.5993	33.8685	25.967	203.99	0.115	0.3475	85.516
60.0	10.2365	33.8826	26.041	197.16	0.135	0.2947	87.471
70.0	9.8289	33.8928	26.118	190.01	0.155	0.2327	88.415
80.0	9.5810	33.9187	26.179	184.34	0.173	0.2115	88.728
90.0	9.1961	33.9542	26.270	175.90	0.191	0.1761	89.262
100.0	9.0755	33.9757	26.306	172.64	0.209	0.1735	89.424
120.0	8.8835	34.0209	26.372	166.73	0.243	0.1782	89.540
140.0	8.5977	34.0636	26.450	159.62	0.275	0.1667	89.657
160.0	8.3673	34.0886	26.506	154.70	0.307	0.1506	89.743
180.0	8.2857	34.1133	26.538	152.02	0.337	0.1573	89.804
200.0	8.2731	34.1596	26.576	148.74	0.367	0.1917	89.784
250.0	7.8315	34.1921	26.668	140.75	0.440	0.1507	89.950
300.0	7.4846	34.2007	26.726	135.97	0.509	0.1067	89.988
350.0	7.0882	34.2172	26.795	129.98	0.576	0.0634	89.399
400.0	6.8917	34.2443	26.844	125.99	0.640	0.0573	89.872
450.0	6.7184	34.2631	26.882	122.95	0.702	0.0482	90.057
500.0	5.8374	34.1812	26.931	118.04	0.762	-0.1301	90.034
550.0	5.7165	34.2467	26.999	112.24	0.819	-0.0937	90.034
600.0	5.5847	34.3209	27.074	105.65	0.874	-0.0517	89.714
650.0	5.2952	34.3392	27.123	101.19	0.926	-0.0719	89.686
700.0	5.0711	34.3580	27.165	97.55	0.975	-0.0835	89.721
750.0	4.7852	34.3831	27.217	92.68	1.023	-0.0962	89.832
800.0	4.5750	34.4022	27.256	89.20	1.068	-0.1045	89.973
850.0	4.4546	34.4169	27.281	87.14	1.112	-0.1063	89.937
900.0	4.2701	34.4352	27.316	84.01	1.155	-0.1117	89.870
950.0	4.1344	34.4477	27.340	81.91	1.196	-0.1163	89.925
1000.0	4.0247	34.4575	27.360	80.30	1.237	-0.1202	89.941
1065.0	3.8562	34.4702	27.388	77.88	1.288	-0.1275	89.955

**STATION: 22**  
**LAT: 36° 54.5 N**

**DATE: 25-July-1996 2237 UTC**  
**LON: 122° 59.0 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$	%Trans
3.0	13.8488	33.5429	25.093	285.98	0.009	0.7237	82.458
5.0	13.8456	33.5433	25.094	285.94	0.014	0.7232	82.403
10.0	13.8048	33.5484	25.107	284.89	0.029	0.7185	82.110
15.0	13.4860	33.5958	25.209	275.33	0.043	0.6891	81.012
20.0	12.8553	33.6267	25.359	261.19	0.056	0.5848	78.118
25.0	12.1522	33.7731	25.609	237.53	0.069	0.5610	76.810
30.0	11.5471	33.7887	25.734	225.70	0.080	0.4579	85.007
40.0	10.7228	33.8379	25.921	208.11	0.102	0.3455	86.848
50.0	10.3715	33.8636	26.003	200.57	0.122	0.3035	87.926
60.0	10.2533	33.8778	26.034	197.78	0.142	0.2938	87.538
70.0	9.7621	33.8895	26.126	189.19	0.162	0.2188	88.694
80.0	9.4738	33.9172	26.196	182.77	0.180	0.1924	89.133
90.0	9.2465	33.9512	26.259	176.90	0.198	0.1819	89.367
100.0	9.0681	33.9688	26.302	173.03	0.216	0.1668	89.388
120.0	8.8083	34.0216	26.384	165.54	0.249	0.1668	89.471
140.0	8.7157	34.0633	26.432	161.41	0.282	0.1849	89.652
160.0	8.6783	34.1126	26.477	157.55	0.314	0.2177	89.676
180.0	8.5478	34.1430	26.521	153.70	0.345	0.2210	89.810
200.0	8.0741	34.1092	26.566	149.57	0.376	0.1220	89.945
250.0	7.6173	34.1283	26.649	142.42	0.448	0.0693	90.094
300.0	7.4332	34.1769	26.714	137.00	0.518	0.0806	89.798
350.0	7.1699	34.2201	26.786	130.89	0.585	0.0771	90.025
400.0	6.6860	34.2074	26.842	125.93	0.649	0.0006	90.145
450.0	6.0434	34.1879	26.911	119.57	0.711	-0.0986	90.064
500.0	5.7407	34.2317	26.983	113.05	0.769	-0.1021	90.029
550.0	5.6137	34.2608	27.022	109.88	0.825	-0.0950	90.016
600.0	5.5800	34.3129	27.068	106.18	0.879	-0.0585	89.492
650.0	5.2589	34.3346	27.124	101.08	0.930	-0.0798	89.821
700.0	5.0675	34.3604	27.167	97.33	0.980	-0.0820	89.769
750.0	4.8942	34.3802	27.203	94.24	1.028	-0.0864	89.831
800.0	4.6655	34.3912	27.238	91.12	1.074	-0.1034	89.788
850.0	4.5025	34.3997	27.263	88.99	1.119	-0.1148	89.982
900.0	4.3553	34.4257	27.299	85.75	1.163	-0.1103	89.999
950.0	4.1901	34.4424	27.330	82.97	1.205	-0.1147	89.938
1000.0	4.0222	34.4549	27.358	80.45	1.246	-0.1224	89.956
1500.0	2.8800	34.5514	27.547	63.32	1.600	-0.1571	90.150
2000.0	2.0974	34.6081	27.661	52.28	1.887	-0.1793	90.159
2500.0	1.7762	34.6521	27.724	46.95	2.134	-0.1716	90.001
2695.0	1.6962	34.6608	27.738	45.92	2.224	-0.1717	89.984

**STATION: 23**  
**LAT: 36° 59.1 N**

**DATE: 26-July-1996 0050 UTC**  
**LON: 123° 3.4 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$	%Trans
3.0	14.1247	33.6830	25.144	281.14	0.008	0.8926	77.594
5.0	14.1256	33.6840	25.145	281.13	0.014	0.8935	77.588
10.0	13.9324	33.6788	25.181	277.83	0.028	0.8484	79.161
15.0	12.4891	33.6991	25.486	248.91	0.041	0.5688	83.628
20.0	12.0204	33.7039	25.580	240.15	0.053	0.4811	85.216
25.0	11.5267	33.7265	25.689	229.82	0.065	0.4050	86.863
30.0	11.1318	33.7470	25.777	221.56	0.077	0.3479	86.417
40.0	10.6750	33.7867	25.890	211.10	0.098	0.2965	87.828
50.0	10.3790	33.7750	25.932	207.25	0.119	0.2347	88.730
60.0	10.3321	33.8559	26.004	200.70	0.139	0.2902	88.694
70.0	9.7615	33.8277	26.078	193.75	0.159	0.1698	88.729
80.0	9.3894	33.8356	26.146	187.50	0.178	0.1139	89.438
90.0	9.2818	33.8535	26.177	184.70	0.197	0.1103	89.558
100.0	9.1908	33.9069	26.234	179.52	0.215	0.1376	89.646
120.0	8.9686	33.9794	26.326	171.10	0.250	0.1589	89.584
140.0	8.6852	34.0046	26.391	165.31	0.284	0.1336	89.738
160.0	8.6163	34.0658	26.450	160.09	0.316	0.1710	89.658
180.0	8.6359	34.1061	26.479	157.75	0.348	0.2056	89.772
200.0	8.5139	34.1371	26.522	153.98	0.379	0.2108	89.816
250.0	7.8567	34.1381	26.622	145.11	0.454	0.1118	89.915
300.0	7.5405	34.1932	26.712	137.32	0.525	0.1087	89.740
350.0	7.2394	34.2172	26.774	132.07	0.592	0.0844	90.063
400.0	6.4365	34.1894	26.861	123.94	0.656	-0.0466	90.042
450.0	5.9519	34.1821	26.917	118.82	0.717	-0.1146	90.031
500.0	5.7958	34.2168	26.965	114.86	0.775	-0.1071	89.915
550.0	5.7854	34.2901	27.025	109.90	0.832	-0.0511	89.568
600.0	5.4877	34.3001	27.069	105.96	0.885	-0.0796	89.943
650.0	5.2695	34.3326	27.121	101.37	0.937	-0.0802	89.820
700.0	5.0805	34.3539	27.160	97.98	0.987	-0.0857	89.857
750.0	4.8412	34.3790	27.208	93.68	1.035	-0.0932	89.975
800.0	4.6665	34.3994	27.244	90.53	1.081	-0.0968	89.691
850.0	4.5153	34.4116	27.271	88.26	1.126	-0.1040	89.954
900.0	4.3300	34.4260	27.302	85.41	1.169	-0.1127	89.895
950.0	4.1906	34.4375	27.327	83.33	1.211	-0.1185	89.928
1000.0	3.9615	34.4482	27.359	80.23	1.252	-0.1338	90.025
1500.0	2.8979	34.5455	27.541	63.97	1.607	-0.1602	90.038
2000.0	2.0805	34.6082	27.662	52.07	1.894	-0.1805	90.055
2185.0	1.9408	34.6276	27.690	49.67	1.987	-0.1769	89.848

**STATION: 24**  
**LAT: 37° 3.7 N**

**DATE: 26-July-1996 0244 UTC**  
**LON: 123° 7.9 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$	%Trans
3.0	13.6683	33.8055	25.333	263.14	0.008	0.8925	59.036
5.0	13.6480	33.8094	25.341	262.51	0.013	0.8913	59.159
10.0	12.5830	33.8038	25.548	242.92	0.026	0.6714	71.080
15.0	11.1237	33.8141	25.831	216.13	0.037	0.3998	84.237
20.0	10.7429	33.7709	25.865	212.98	0.048	0.2965	86.975
25.0	10.8072	33.8333	25.902	209.55	0.059	0.3573	86.852
30.0	10.7354	33.8389	25.919	208.03	0.069	0.3487	87.014
40.0	10.3363	33.8433	25.993	201.29	0.090	0.2814	87.763
50.0	9.8741	33.8386	26.068	194.35	0.110	0.1978	88.899
60.0	9.9198	33.9132	26.118	189.75	0.129	0.2645	88.363
70.0	9.7431	33.9215	26.155	186.51	0.147	0.2410	88.479
80.0	9.5867	33.9457	26.200	182.43	0.166	0.2337	88.608
90.0	9.5131	33.9363	26.204	182.16	0.184	0.2139	88.684
100.0	9.4165	33.9690	26.246	178.42	0.202	0.2236	88.914
120.0	9.1129	34.0014	26.321	171.68	0.237	0.1994	89.501
140.0	8.8267	34.0783	26.426	161.97	0.270	0.2142	89.644
160.0	8.6688	34.1060	26.473	157.90	0.302	0.2109	89.698
180.0	8.5408	34.1401	26.520	153.81	0.334	0.2176	89.680
200.0	8.4303	34.1647	26.556	150.68	0.364	0.2197	89.790
250.0	8.0308	34.1905	26.637	143.75	0.438	0.1789	89.800
300.0	7.7123	34.2125	26.702	138.33	0.509	0.1488	90.003
350.0	7.1477	34.2145	26.784	131.00	0.576	0.0696	90.040
400.0	6.3259	34.1481	26.843	125.55	0.640	-0.0935	89.975
450.0	6.0322	34.1827	26.908	119.80	0.701	-0.1041	89.992
500.0	6.0134	34.2581	26.970	114.60	0.760	-0.0475	89.919
550.0	5.7998	34.2917	27.024	109.96	0.816	-0.0480	89.708
600.0	5.2910	34.2788	27.076	105.06	0.870	-0.1196	90.046
650.0	5.0603	34.3029	27.122	100.96	0.921	-0.1276	90.009
700.0	4.9522	34.3555	27.176	96.26	0.970	-0.0989	89.953
750.0	4.7392	34.3736	27.215	92.83	1.018	-0.1088	90.005
800.0	4.5654	34.3973	27.253	89.45	1.063	-0.1094	90.004
850.0	4.3860	34.4097	27.283	86.84	1.107	-0.1192	89.909
900.0	4.2675	34.4244	27.308	84.78	1.150	-0.1205	89.984
950.0	4.1306	34.4353	27.331	82.77	1.192	-0.1264	89.927
1000.0	3.9613	34.4484	27.359	80.21	1.233	-0.1336	89.939
1500.0	2.8045	34.5516	27.554	62.41	1.582	-0.1634	90.123
2000.0	2.0392	34.6170	27.673	50.92	1.865	-0.1767	89.841
2133.0	1.9438	34.6273	27.689	49.52	1.932	-0.1766	89.809

**STATION: 25**  
**LAT: 37° 8.3 N**

**DATE: 26-July-1996 0447 UTC**  
**LON: 123° 12.5 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$	%Trans
3.0	13.7246	33.5082	25.092	286.10	0.009	0.6701	83.814
5.0	13.7258	33.5100	25.093	286.04	0.014	0.6717	83.794
10.0	13.7241	33.5212	25.102	285.31	0.029	0.6801	83.590
15.0	12.9089	33.6648	25.378	259.25	0.042	0.6255	77.166
20.0	11.8549	33.6905	25.600	238.16	0.055	0.4387	82.023
25.0	11.3414	33.6946	25.698	228.94	0.066	0.3452	84.818
30.0	11.2052	33.6959	25.724	226.60	0.078	0.3210	85.438
40.0	10.9839	33.7328	25.793	220.30	0.100	0.3095	87.059
50.0	10.5801	33.7615	25.887	211.59	0.122	0.2593	88.011
60.0	9.8158	33.6381	25.921	208.48	0.143	0.0288	88.733
70.0	9.8183	33.7316	25.994	201.78	0.163	0.1032	89.052
80.0	10.0005	33.8639	26.067	195.10	0.183	0.2388	88.882
90.0	9.7692	33.8818	26.120	190.26	0.202	0.2136	88.841
100.0	9.2218	33.8442	26.180	184.65	0.221	0.0929	89.482
120.0	9.1834	33.9944	26.304	173.29	0.257	0.2053	89.436
140.0	8.9609	34.0533	26.386	165.87	0.291	0.2157	89.443
160.0	8.7891	34.0834	26.437	161.39	0.324	0.2119	89.614
180.0	8.6619	34.1371	26.499	155.85	0.355	0.2341	89.463
200.0	8.2799	34.1297	26.552	151.05	0.386	0.1692	89.518
250.0	7.9179	34.1814	26.647	142.78	0.460	0.1551	89.699
300.0	7.0550	34.1277	26.728	135.42	0.529	-0.0111	89.978
350.0	6.5360	34.1317	26.802	128.86	0.595	-0.0785	89.950
400.0	6.3541	34.1707	26.857	124.24	0.658	-0.0720	89.955
450.0	6.0616	34.1891	26.909	119.71	0.719	-0.0954	89.883
500.0	5.7737	34.2282	26.977	113.73	0.778	-0.1008	90.007
550.0	5.4927	34.2549	27.032	108.79	0.833	-0.1142	90.007
600.0	5.2289	34.2831	27.086	103.97	0.887	-0.1234	90.009
650.0	5.0041	34.3130	27.136	99.52	0.937	-0.1260	90.029
700.0	4.8902	34.3479	27.177	96.06	0.986	-0.1118	89.996
750.0	4.6617	34.3782	27.227	91.54	1.033	-0.1136	89.937
800.0	4.4690	34.3870	27.256	89.04	1.078	-0.1278	89.995
850.0	4.3254	34.4141	27.293	85.78	1.122	-0.1221	90.006
900.0	4.1970	34.4288	27.319	83.61	1.164	-0.1243	89.972
950.0	4.1076	34.4490	27.344	81.49	1.206	-0.1180	89.983
1000.0	3.9643	34.4654	27.372	78.99	1.246	-0.1200	89.950
1500.0	2.7597	34.5610	27.566	61.19	1.590	-0.1599	89.992
1997.0	2.1090	34.6147	27.665	51.92	1.870	-0.1732	89.668

**STATION: 26**  
**LAT: 37° 12.8 N**

**DATE: 26-July-1996 0640 UTC**  
**LON: 123° 16.9 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$	%Trans
3.0	13.6102	33.5530	25.150	280.58	0.008	0.6815	83.553
5.0	13.6101	33.5530	25.150	280.63	0.014	0.6814	83.575
10.0	13.6096	33.5636	25.158	279.97	0.028	0.6895	83.497
15.0	13.4849	33.5860	25.201	276.03	0.042	0.6811	83.135
20.0	12.2853	33.6629	25.497	247.96	0.055	0.5000	80.974
25.0	11.9834	33.6873	25.574	240.81	0.067	0.4607	82.869
30.0	11.9930	33.7439	25.616	236.93	0.079	0.5071	84.749
40.0	11.4117	33.7367	25.719	227.38	0.102	0.3913	86.993
50.0	10.7573	33.7654	25.859	214.26	0.124	0.2941	88.010
60.0	10.5392	33.7852	25.913	209.36	0.145	0.2707	88.276
70.0	10.4507	33.8251	25.959	205.14	0.166	0.2865	88.710
80.0	10.2330	33.8631	26.027	198.95	0.186	0.2782	88.837
90.0	9.7108	33.8256	26.085	193.49	0.206	0.1593	88.971
100.0	9.2992	33.8309	26.157	186.82	0.225	0.0951	89.400
120.0	9.3251	33.9586	26.253	178.13	0.262	0.2001	89.243
140.0	8.9433	33.9975	26.345	169.74	0.296	0.1688	89.448
160.0	8.7115	34.0438	26.418	163.15	0.330	0.1685	89.570
180.0	8.4794	34.0735	26.477	157.83	0.362	0.1556	89.630
200.0	7.9448	34.0218	26.517	154.19	0.393	0.0336	89.773
250.0	7.2801	34.0299	26.619	145.02	0.468	-0.0565	89.907
300.0	7.0215	34.1001	26.711	137.01	0.538	-0.0376	89.979
350.0	6.6761	34.1441	26.793	129.80	0.605	-0.0502	90.007
400.0	6.2876	34.1788	26.872	122.76	0.669	-0.0741	89.910
450.0	6.0245	34.1975	26.921	118.60	0.729	-0.0934	89.983
500.0	5.7275	34.2184	26.974	113.88	0.787	-0.1142	90.018
550.0	5.3970	34.2406	27.032	108.66	0.843	-0.1368	89.994
600.0	5.2125	34.2813	27.087	103.90	0.896	-0.1267	90.012
650.0	4.8955	34.2931	27.133	99.68	0.947	-0.1539	90.038
700.0	4.7550	34.3242	27.174	96.17	0.996	-0.1454	89.999
750.0	4.6322	34.3470	27.206	93.49	1.043	-0.1413	90.018
800.0	4.5058	34.3804	27.246	89.98	1.089	-0.1291	90.029
850.0	4.3738	34.4088	27.284	86.76	1.133	-0.1212	90.001
900.0	4.2432	34.4266	27.312	84.33	1.176	-0.1213	89.979
950.0	4.0387	34.4324	27.338	81.89	1.218	-0.1381	90.040
1000.0	3.8348	34.4414	27.366	79.23	1.258	-0.1517	90.030
1500.0	2.7901	34.5514	27.555	62.25	1.609	-0.1648	89.982
2000.0	2.0672	34.6112	27.666	51.68	1.893	-0.1791	89.837
2003.0	2.0638	34.6106	27.666	51.69	1.894	-0.1799	89.804

STATION: 27  
LAT: 37° 17.7 N

DATE: 26-July-1996 0843 UTC  
LON: 123° 20.9 W

P (dbar)	T (°C)	S (PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$	%Trans
3.0	14.7476	33.2847	24.705	322.95	0.010	0.7138	86.466
5.0	14.7469	33.2844	24.705	323.01	0.016	0.7134	86.479
10.0	14.6845	33.2892	24.722	321.52	0.032	0.7033	86.595
15.0	14.3365	33.3053	24.809	313.43	0.048	0.6399	86.665
20.0	14.1554	33.3242	24.861	308.56	0.064	0.6157	86.397
25.0	13.5691	33.3898	25.033	292.34	0.079	0.5433	85.886
30.0	13.4323	33.3939	25.064	289.53	0.093	0.5179	86.142
40.0	12.8179	33.4519	25.231	273.83	0.122	0.4382	85.965
50.0	12.5289	33.5489	25.363	261.55	0.148	0.4570	86.262
60.0	11.8120	33.6581	25.584	240.71	0.173	0.4041	87.660
70.0	10.7909	33.6503	25.764	223.77	0.196	0.2085	88.771
80.0	10.5839	33.6394	25.792	221.31	0.219	0.1627	89.061
90.0	10.0795	33.7224	25.943	207.06	0.240	0.1401	89.314
100.0	9.8595	33.7515	26.003	201.55	0.261	0.1255	89.345
120.0	9.0317	33.8232	26.194	183.66	0.299	0.0452	89.458
140.0	9.0593	33.9283	26.272	176.65	0.335	0.1326	89.576
160.0	8.5382	33.9537	26.374	167.25	0.369	0.0702	89.647
180.0	8.3412	33.9807	26.425	162.67	0.402	0.0609	89.652
200.0	8.0385	34.0204	26.502	155.65	0.434	0.0464	89.747
250.0	7.3270	34.0272	26.611	145.87	0.509	-0.0521	89.805
300.0	6.9468	34.0735	26.700	137.97	0.580	-0.0688	89.841
350.0	6.6395	34.1297	26.786	130.38	0.647	-0.0664	90.024
400.0	6.2826	34.1696	26.865	123.38	0.711	-0.0820	89.951
450.0	5.8335	34.1805	26.931	117.43	0.771	-0.1306	89.984
500.0	5.5911	34.2208	26.993	111.97	0.828	-0.1288	89.957
550.0	5.3047	34.2554	27.055	106.41	0.883	-0.1359	89.935
600.0	5.1855	34.3020	27.106	102.03	0.935	-0.1135	89.948
650.0	4.9387	34.3137	27.144	98.67	0.985	-0.1328	89.977
700.0	4.7751	34.3459	27.189	94.80	1.034	-0.1261	89.963
750.0	4.5499	34.3612	27.226	91.45	1.080	-0.1391	89.961
800.0	4.4511	34.3884	27.259	88.73	1.125	-0.1286	89.951
850.0	4.2913	34.3982	27.284	86.55	1.169	-0.1381	89.972
900.0	4.0946	34.4201	27.322	83.03	1.211	-0.1417	90.020
950.0	4.0082	34.4339	27.342	81.41	1.252	-0.1399	89.984
1000.0	3.8184	34.4400	27.367	79.13	1.293	-0.1543	89.965
1500.0	2.8061	34.5491	27.552	62.61	1.642	-0.1653	89.904
2000.0	2.1126	34.6095	27.661	52.36	1.926	-0.1771	89.481
2497.0	1.7626	34.6492	27.722	46.97	2.169	-0.1748	88.350

**STATION: 28**                   **DATE: 26-July-1996 1107 UTC**  
**LAT: 37° 22.4 N**               **LON: 123° 25.2 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$	%Trans
3.0	14.8710	33.2489	24.651	328.10	0.010	0.7128	85.986
5.0	14.8712	33.2486	24.651	328.18	0.016	0.7125	86.029
10.0	14.8708	33.2486	24.651	328.31	0.033	0.7122	86.023
15.0	14.6980	33.2742	24.708	323.02	0.049	0.6942	86.711
20.0	14.3507	33.2997	24.801	314.26	0.065	0.6385	87.142
25.0	13.6370	33.4091	25.034	292.24	0.080	0.5728	86.706
30.0	13.1426	33.3869	25.116	284.53	0.095	0.4531	86.456
40.0	11.6681	33.2355	25.282	268.90	0.122	0.0416	87.008
50.0	10.8522	33.3008	25.480	250.24	0.148	-0.0579	88.151
60.0	10.2547	33.2636	25.555	243.28	0.173	-0.1940	88.197
70.0	10.0630	33.3350	25.643	235.09	0.197	-0.1705	88.609
80.0	9.5526	33.4721	25.835	217.01	0.220	-0.1479	89.376
90.0	9.5656	33.5953	25.929	208.27	0.241	-0.0478	89.404
100.0	9.2323	33.6807	26.050	196.93	0.261	-0.0350	89.416
120.0	8.8253	33.7847	26.196	183.38	0.299	-0.0182	89.437
140.0	8.6316	33.8951	26.313	172.64	0.335	0.0386	89.542
160.0	8.3261	33.9335	26.390	165.61	0.368	0.0217	89.579
180.0	7.9561	33.9862	26.487	156.67	0.400	0.0074	89.667
200.0	7.7832	33.9996	26.523	153.53	0.431	-0.0077	89.717
250.0	7.1151	34.0223	26.636	143.33	0.505	-0.0856	89.848
300.0	6.6463	34.0443	26.718	136.12	0.575	-0.1324	89.885
350.0	6.2672	34.0742	26.791	129.62	0.641	-0.1589	89.910
400.0	5.8592	34.1101	26.871	122.37	0.705	-0.1825	89.919
450.0	5.8977	34.1983	26.937	116.92	0.764	-0.1086	89.979
500.0	5.6280	34.2177	26.986	112.67	0.822	-0.1268	89.992
550.0	5.3098	34.2348	27.038	108.00	0.876	-0.1515	89.987
600.0	5.1009	34.2598	27.082	104.13	0.929	-0.1565	90.001
650.0	4.9269	34.2897	27.127	100.31	0.980	-0.1530	89.989
700.0	4.8597	34.3289	27.166	97.10	1.029	-0.1302	89.980
750.0	4.6335	34.3427	27.202	93.83	1.077	-0.1446	90.003
800.0	4.4724	34.3890	27.257	88.94	1.123	-0.1259	89.960
850.0	4.4183	34.4038	27.275	87.66	1.167	-0.1204	89.962
900.0	4.2295	34.4219	27.310	84.51	1.210	-0.1264	89.966
947.0	4.1107	34.4307	27.329	82.85	1.249	-0.1320	89.967

**STATION: 29**                   **DATE: 27-July-1996 1737 UTC**  
**LAT: 36° 50.0 N**               **LON: 121° 55.4 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$	%Trans
3.0	14.9146	33.7852	25.055	289.64	0.009	1.1445	68.703
5.0	14.6868	33.7480	25.075	287.75	0.014	1.0651	67.827
10.0	12.1368	33.7115	25.563	241.48	0.028	0.5102	77.089
15.0	11.2668	33.7814	25.779	221.01	0.039	0.4003	83.968
20.0	10.7713	33.7970	25.880	211.54	0.050	0.3223	86.332
25.0	10.3490	33.8316	25.981	202.05	0.061	0.2747	87.027
30.0	10.0968	33.8583	26.045	196.07	0.070	0.2519	84.723
40.0	9.8990	33.8739	26.091	191.93	0.090	0.2302	80.466
50.0	9.6989	33.8869	26.135	187.97	0.109	0.2066	83.216
60.0	9.5969	33.9007	26.162	185.54	0.127	0.2002	80.359
71.0	9.5047	33.9114	26.186	183.51	0.148	0.1931	65.761

**STATION: 30**                   **DATE: 27-July-1996 1816 UTC**  
**LAT: 36° 51.5 N**               **LON: 121° 53.2 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$	%Trans
3.0	14.8399	33.7636	25.054	289.69	0.009	1.1111	65.446
5.0	14.0615	33.6801	25.155	280.15	0.014	0.8768	65.404
10.0	12.6247	33.6650	25.433	253.88	0.028	0.5696	74.247
15.0	11.4589	33.7293	25.704	228.20	0.040	0.3947	82.958
20.0	10.7325	33.7967	25.887	210.90	0.051	0.3151	85.314
25.0	10.6337	33.8257	25.927	207.20	0.061	0.3203	85.666
30.0	10.5203	33.8302	25.950	205.09	0.071	0.3036	86.334
40.0	10.2610	33.8535	26.014	199.29	0.091	0.2764	83.509
43.0	10.2135	33.8588	26.026	198.19	0.097	0.2722	82.341

**STATION: 31**                   **DATE: 27-July-1996 1847 UTC**  
**LAT: 36° 52.6 N**               **LON: 121° 51.6 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$	%Trans
3.0	15.3531	33.8198	24.986	296.24	0.009	1.2693	62.463
5.0	14.6462	33.7991	25.123	283.17	0.015	1.0963	64.993
11.0	12.7430	33.8341	25.541	243.57	0.030	0.7257	76.024

**STATION: 32**                   **DATE: 27-July-1996 1924 UTC**  
**LAT: 36° 55.2 N**               **LON: 121° 54.5 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$	%Trans
3.0	15.7041	33.8125	24.902	304.20	0.009	1.3432	63.583
5.0	15.5981	33.8040	24.919	302.63	0.015	1.3123	63.801
11.0	12.4093	33.7715	25.558	242.01	0.032	0.6103	76.824

**STATION: 33**                   **DATE: 27-July-1996 1954 UTC**  
**LAT: 36° 52.4 N**               **LON: 121° 56.4 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$	%Trans
3.0	14.5525	33.8028	25.146	280.94	0.008	1.0789	68.898
5.0	14.3990	33.8044	25.180	277.77	0.014	1.0468	67.864
10.0	13.1891	33.7990	25.425	254.59	0.027	0.7886	72.561
15.0	11.4413	33.7998	25.762	222.68	0.039	0.4472	83.644
20.0	10.8576	33.8252	25.887	210.89	0.050	0.3601	85.777
25.0	10.7137	33.8280	25.915	208.37	0.060	0.3363	86.373
30.0	10.5626	33.8336	25.946	205.54	0.071	0.3138	87.040
40.0	10.3215	33.8601	26.008	199.80	0.091	0.2921	79.453
45.0	10.3015	33.8693	26.019	198.89	0.101	0.2958	66.359

**STATION: 34**  
**LAT: 36° 51.2 N**

**DATE: 27-July-1996 2023 UTC**  
**LON: 121° 57.1 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$	%Trans
3.0	14.5286	33.8083	25.156	280.05	0.008	1.0780	69.366
5.0	14.4316	33.8049	25.174	278.39	0.014	1.0543	68.473
10.0	14.0518	33.7947	25.246	271.68	0.028	0.9647	70.125
15.0	13.0392	33.7796	25.441	253.25	0.041	0.7423	73.789
20.0	11.4085	33.7799	25.752	223.70	0.053	0.4252	81.762
25.0	11.0660	33.8239	25.849	214.64	0.064	0.3968	85.980
30.0	10.7992	33.8220	25.895	210.36	0.074	0.3468	87.341
40.0	10.3053	33.8515	26.004	200.17	0.095	0.2825	88.199
50.0	10.0471	33.8678	26.061	194.96	0.114	0.2505	87.738
60.0	9.8652	33.8856	26.106	190.92	0.134	0.2333	86.852
70.0	9.6651	33.9050	26.155	186.49	0.153	0.2148	82.790
80.0	9.5216	33.9297	26.198	182.59	0.171	0.2103	74.031
83.0	9.4775	33.9322	26.207	181.77	0.176	0.2049	74.487

**STATION: 35**  
**LAT: 36° 50.6 N**

**DATE: 27-July-1996 2042 UTC**  
**LON: 121° 57.8 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$	%Trans
3.0	13.8842	33.8147	25.296	266.69	0.008	0.9451	70.315
5.0	12.4348	33.7374	25.526	244.85	0.013	0.5886	78.245
10.0	11.2135	33.7444	25.760	222.73	0.025	0.3613	83.240
15.0	10.5710	33.7403	25.871	212.27	0.036	0.2417	86.447
20.0	10.3799	33.7418	25.906	209.11	0.046	0.2091	87.600
25.0	10.2447	33.7782	25.957	204.30	0.056	0.2142	88.206
30.0	10.1768	33.8298	26.009	199.47	0.066	0.2432	88.318
40.0	9.9530	33.8667	26.076	193.33	0.086	0.2337	87.973
50.0	9.8419	33.8880	26.112	190.17	0.105	0.2315	86.808
60.0	9.6283	33.9100	26.164	185.34	0.124	0.2128	85.577
70.0	9.5372	33.9238	26.190	183.09	0.143	0.2083	82.099
80.0	9.4570	33.9356	26.213	181.15	0.161	0.2042	78.074
90.0	9.4207	33.9406	26.223	180.39	0.179	0.2020	74.812
100.0	9.3645	33.9464	26.237	179.28	0.197	0.1972	76.392
120.0	9.1784	33.9693	26.285	175.07	0.232	0.1846	78.761
140.0	8.9879	33.9977	26.338	170.40	0.267	0.1761	83.089
160.0	8.8764	34.0208	26.374	167.36	0.300	0.1763	85.109
180.0	8.7640	34.0480	26.413	163.99	0.333	0.1797	85.763
200.0	8.6919	34.0587	26.433	162.47	0.366	0.1765	84.957
235.0	8.3630	34.0971	26.514	155.31	0.422	0.1555	87.369

**STATION: 36**  
**LAT: 36° 56.2 N**

**DATE: 27-July-1996 2150 UTC**  
**LON: 122° 0.9 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$	%Trans
3.0	15.7063	33.8012	24.893	305.08	0.009	1.3349	65.455
5.0	15.2919	33.7812	24.969	297.84	0.015	1.2253	65.884
10.0	13.9643	33.7945	25.264	269.95	0.029	0.9461	68.424
15.0	12.5204	33.7669	25.533	244.49	0.042	0.6285	75.646
17.0	11.5261	33.8274	25.768	222.17	0.047	0.4848	68.644

**STATION: 37**           **DATE: 27-July-1996 2217 UTC**  
**LAT: 36° 53.8 N**       **LON: 122° 2.8 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$	%Trans
3.0	14.8154	33.7988	25.087	286.60	0.009	1.1333	69.977
5.0	13.5686	33.7340	25.299	266.51	0.014	0.8154	71.498
10.0	11.6914	33.7318	25.662	232.09	0.027	0.4418	82.074
15.0	10.6953	33.7730	25.875	211.92	0.038	0.2898	85.683
20.0	10.4296	33.7684	25.918	207.95	0.048	0.2390	87.036
25.0	10.3421	33.8195	25.973	202.84	0.058	0.2639	87.891
30.0	10.3011	33.8367	25.993	200.99	0.068	0.2703	88.113
40.0	10.1677	33.8646	26.038	196.95	0.088	0.2690	87.547
50.0	9.9504	33.8846	26.091	192.16	0.108	0.2473	70.721
53.0	9.8936	33.8934	26.107	190.66	0.114	0.2445	66.750

**STATION: 38**           **DATE: 27-July-1996 2301 UTC**  
**LAT: 36° 56.2 N**       **LON: 122° 7.0 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$	%Trans
3.0	14.5266	33.8033	25.152	280.38	0.008	1.0737	62.233
5.0	14.2686	33.8110	25.213	274.66	0.014	1.0239	63.551
10.0	11.9868	33.8238	25.678	230.51	0.027	0.5701	77.185
15.0	11.2382	33.8270	25.820	217.15	0.038	0.4310	82.375
20.0	11.1515	33.8330	25.840	215.32	0.048	0.4197	78.115
25.0	10.7902	33.8330	25.905	209.29	0.059	0.3540	86.362
30.0	10.5272	33.8452	25.961	204.09	0.069	0.3167	83.516
39.0	10.2907	33.8688	26.020	198.63	0.087	0.2936	69.921

**STATION: 39**           **DATE: 27-July-1996 2352 UTC**  
**LAT: 36° 58.7 N**       **LON: 122° 13.0 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$	%Trans
3.0	11.9652	33.7779	25.647	233.29	0.007	0.5293	74.336
5.0	11.9350	33.7763	25.652	232.92	0.012	0.5222	74.942
10.0	11.6066	33.7611	25.701	228.34	0.023	0.4478	76.229
15.0	11.3095	33.7760	25.767	222.15	0.034	0.4039	78.797
20.0	11.2243	33.7788	25.785	220.59	0.045	0.3902	79.910
25.0	11.1310	33.7721	25.797	219.58	0.056	0.3677	80.708
30.0	10.8706	33.7691	25.841	215.48	0.067	0.3178	82.497
40.0	10.3619	33.8003	25.955	204.89	0.088	0.2519	80.143
47.0	10.3022	33.8148	25.976	202.98	0.103	0.2528	77.100

**STATION: 40**           **DATE: 28-July-1996 0039 UTC**  
**LAT: 37° 2.0 N**       **LON: 122° 17.0 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$	%Trans
3.0	11.5110	33.7684	25.724	225.95	0.007	0.4357	75.333
5.0	11.3873	33.7645	25.744	224.13	0.011	0.4095	75.554
10.0	10.6703	33.7642	25.872	212.08	0.022	0.2787	81.111
15.0	10.0388	33.7990	26.008	199.22	0.033	0.1953	84.340
20.0	9.9233	33.8217	26.046	195.79	0.042	0.1934	83.585
25.0	9.8535	33.8381	26.070	193.56	0.052	0.1945	82.179
30.0	9.8249	33.8456	26.081	192.65	0.062	0.1954	81.206
40.0	9.7763	33.8608	26.101	190.94	0.081	0.1991	77.286
50.0	9.7043	33.8626	26.115	189.86	0.100	0.1882	65.960
53.0	9.6900	33.8646	26.119	189.55	0.106	0.1873	62.080

**STATION: 41**           **DATE: 28-July-1996 0127 UTC**  
**LAT: 37° 5.4 N**       **LON: 122° 21.5 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$	%Trans
3.0	13.4381	33.7937	25.371	259.54	0.008	0.8354	71.759
5.0	13.0865	33.7727	25.426	254.41	0.013	0.7467	74.754
10.0	12.9181	33.7857	25.469	250.40	0.026	0.7227	75.848
15.0	12.8956	33.8021	25.487	248.88	0.038	0.7310	74.424
20.0	12.7341	33.8004	25.517	246.10	0.050	0.6972	74.813
25.0	12.5826	33.8064	25.552	242.97	0.063	0.6716	75.712
30.0	12.4848	33.8119	25.575	240.87	0.075	0.6565	76.206
41.0	10.9616	33.8013	25.850	214.88	0.101	0.3595	84.777

**STATION: 42**           **DATE: 28-July-1996 0208 UTC**  
**LAT: 37° 3.0 N**       **LON: 122° 24.4 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$	%Trans
3.0	13.8492	33.7174	25.228	273.16	0.008	0.8612	75.631
5.0	13.8339	33.7199	25.233	272.73	0.014	0.8599	75.903
10.0	13.1872	33.6368	25.300	266.47	0.027	0.6602	79.538
15.0	12.1533	33.5539	25.438	253.49	0.040	0.3882	83.082
20.0	11.8266	33.5999	25.535	244.35	0.053	0.3616	83.867
25.0	11.3644	33.6381	25.650	233.52	0.065	0.3047	85.048
30.0	10.7924	33.6577	25.768	222.46	0.076	0.2161	86.141
40.0	9.9671	33.7477	25.981	202.37	0.097	0.1419	88.639
50.0	9.8201	33.8076	26.052	195.78	0.117	0.1642	88.711
60.0	9.5335	33.8632	26.143	187.32	0.136	0.1600	84.736
70.0	9.4200	33.8824	26.177	184.32	0.155	0.1562	81.058
80.0	9.3570	33.8876	26.192	183.14	0.173	0.1498	78.867
90.0	9.2514	33.8977	26.217	180.94	0.191	0.1403	77.627
93.0	9.1915	33.9078	26.234	179.33	0.197	0.1386	77.938

**STATION: 43**  
**LAT: 36° 59.4 N**

**DATE: 28-July-1996 0251 UTC**  
**LON: 122° 19.5 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$	%Trans
3.0	12.8765	33.7733	25.468	250.35	0.008	0.7048	75.291
5.0	12.8737	33.7744	25.469	250.27	0.013	0.7051	75.273
10.0	12.7627	33.7768	25.493	248.13	0.025	0.6846	75.624
15.0	12.5219	33.7889	25.550	242.89	0.037	0.6461	76.595
20.0	12.2809	33.7822	25.591	239.09	0.049	0.5933	78.076
25.0	11.5872	33.7257	25.678	230.94	0.061	0.4157	83.346
30.0	11.1756	33.7407	25.764	222.82	0.072	0.3513	84.396
40.0	9.5549	33.8691	26.144	186.84	0.093	0.1686	83.905
50.0	9.4352	33.8951	26.184	183.23	0.111	0.1691	79.281
60.0	9.3056	33.9076	26.215	180.48	0.129	0.1576	78.253
70.0	9.1778	33.9124	26.240	178.34	0.147	0.1404	77.423
80.0	9.1218	33.9216	26.256	176.99	0.165	0.1385	80.274
91.0	9.0772	33.9320	26.271	175.74	0.184	0.1393	80.360

**STATION: 44**  
**LAT: 36° 10.1 N**

**DATE: 28-July-1996 0436 UTC**  
**LON: 122° 25.8 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$	%Trans
3.0	13.2264	33.8328	25.444	252.60	0.008	0.8226	74.704
5.0	13.1950	33.8285	25.447	252.36	0.013	0.8128	74.793
10.0	12.1671	33.8125	25.636	234.54	0.025	0.5955	81.130
15.0	11.1872	33.8364	25.837	215.58	0.036	0.4291	81.427
20.0	10.4864	33.8046	25.936	206.22	0.047	0.2778	86.792
25.0	10.0339	33.8035	26.013	199.01	0.057	0.1978	88.071
30.0	9.8426	33.7962	26.039	196.59	0.067	0.1593	87.879
40.0	9.6538	33.8068	26.079	193.01	0.086	0.1357	87.334
45.0	9.6157	33.8220	26.097	191.38	0.096	0.1413	85.940

**STATION: 45**  
**LAT: 37° 7.1 N**

**DATE: 28-July-1996 0526 UTC**  
**LON: 122° 31.4 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$	%Trans
3.0	13.9616	33.7124	25.201	275.74	0.008	0.8810	77.167
5.0	13.9647	33.7124	25.200	275.85	0.014	0.8816	77.119
10.0	12.9928	33.6539	25.352	261.52	0.027	0.6342	78.467
15.0	12.7303	33.6917	25.434	253.92	0.040	0.6108	79.061
20.0	12.4860	33.6624	25.458	251.68	0.053	0.5391	80.197
25.0	12.2838	33.6336	25.475	250.21	0.065	0.4765	81.307
30.0	12.0993	33.5999	25.484	249.47	0.078	0.4138	82.290
40.0	11.5934	33.5589	25.547	243.71	0.103	0.2844	84.049
50.0	11.1618	33.5538	25.622	236.79	0.127	0.1998	85.250
60.0	10.7505	33.5725	25.710	228.62	0.150	0.1398	86.643
70.0	10.1395	33.5932	25.832	217.21	0.172	0.0483	87.917
80.0	9.6043	33.8198	26.098	192.04	0.193	0.1371	88.406
90.0	9.2544	33.8728	26.197	182.83	0.211	0.1211	83.380
95.0	9.2493	33.8760	26.200	182.62	0.220	0.1227	81.903

**STATION: 46**           **DATE: 28-July-1996 0614 UTC**  
**LAT: 37° 4.4 N**       **LON: 122° 36.5 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$	%Trans
3.0	13.4349	33.6252	25.241	271.88	0.008	0.7020	82.243
5.0	13.4349	33.6254	25.242	271.91	0.014	0.7021	82.216
10.0	13.4304	33.6279	25.245	271.76	0.027	0.7031	82.349
15.0	13.4162	33.6307	25.250	271.41	0.041	0.7022	82.360
20.0	13.2972	33.6152	25.262	270.40	0.054	0.6653	82.380
25.0	12.6292	33.5212	25.321	264.85	0.068	0.4557	83.030
30.0	12.1602	33.6143	25.483	249.56	0.081	0.4375	85.030
40.0	11.2267	33.7295	25.747	224.70	0.104	0.3513	88.031
50.0	10.6031	33.7251	25.854	214.66	0.126	0.2346	88.234
60.0	10.0975	33.7778	25.983	202.65	0.147	0.1877	88.547
70.0	9.7764	33.8223	26.072	194.38	0.167	0.1681	88.971
80.0	9.5771	33.8718	26.143	187.75	0.186	0.1737	88.973
90.0	9.4588	33.9070	26.190	183.49	0.204	0.1817	88.888
100.0	9.3818	33.9285	26.220	180.88	0.222	0.1858	88.837
111.0	9.2941	33.9622	26.261	177.22	0.242	0.1980	87.945

**STATION: 47**           **DATE: 28-July-1996 0646 UTC**  
**LAT: 37° 3.2 N**       **LON: 122° 39.0 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$	%Trans
3.0	13.5829	33.5469	25.151	280.50	0.008	0.6710	82.231
5.0	13.5820	33.5469	25.151	280.53	0.014	0.6708	82.242
10.0	13.5771	33.5460	25.152	280.63	0.028	0.6688	82.264
15.0	13.5084	33.5322	25.155	280.44	0.042	0.6435	82.516
20.0	12.9716	33.4615	25.208	275.53	0.056	0.4774	84.249
25.0	12.7744	33.4663	25.251	271.59	0.070	0.4412	84.939
30.0	11.9994	33.4495	25.386	258.77	0.083	0.2754	86.090
40.0	11.0337	33.5093	25.610	237.67	0.108	0.1413	87.042
50.0	10.8187	33.6012	25.720	227.45	0.131	0.1749	87.496
60.0	10.2559	33.7147	25.906	209.90	0.153	0.1652	88.451
70.0	9.9783	33.7739	26.000	201.21	0.173	0.1640	88.790
80.0	9.7656	33.8225	26.074	194.40	0.193	0.1662	88.826
90.0	9.4151	33.9109	26.201	182.51	0.212	0.1776	88.779
100.0	9.3727	33.9725	26.256	177.47	0.230	0.2192	88.708
120.0	9.2065	34.0277	26.326	171.17	0.265	0.2354	88.358
140.0	8.9750	34.0320	26.367	167.67	0.298	0.2012	88.736
160.0	8.8187	34.0697	26.421	162.85	0.331	0.2058	88.976
180.0	8.7566	34.1189	26.470	158.63	0.364	0.2345	88.894
200.0	8.6882	34.1518	26.507	155.51	0.395	0.2495	88.837
250.0	8.3848	34.1540	26.556	151.67	0.472	0.2035	89.021
273.0	8.2477	34.1526	26.576	150.13	0.506	0.1812	87.972

**STATION: 48**  
**LAT: 37° 1.9 N**

**DATE: 28-July-1996 0726 UTC**  
**LON: 122° 42.0 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$	%Trans
3.0	13.6150	33.4293	25.053	289.77	0.009	0.5848	85.468
5.0	13.6189	33.4281	25.052	289.99	0.014	0.5846	85.520
10.0	13.5402	33.4361	25.074	288.00	0.029	0.5744	85.053
15.0	13.2444	33.4646	25.156	280.34	0.043	0.5356	83.771
20.0	13.2999	33.5661	25.223	274.06	0.057	0.6271	83.498
25.0	13.0380	33.5709	25.280	268.84	0.071	0.5772	83.778
30.0	11.8703	33.6642	25.577	240.62	0.083	0.4207	83.426
40.0	10.6933	33.6367	25.769	222.50	0.106	0.1808	87.309
50.0	10.7610	33.7436	25.841	215.94	0.128	0.2775	87.262
60.0	10.2313	33.8050	25.981	202.82	0.149	0.2324	88.034
70.0	9.8009	33.8624	26.099	191.80	0.169	0.2040	88.268
80.0	9.6227	33.9112	26.167	185.55	0.188	0.2125	88.139
90.0	9.4902	33.9613	26.228	179.95	0.206	0.2299	88.021
100.0	9.3748	33.9867	26.267	176.45	0.224	0.2308	88.241
120.0	9.1042	34.0192	26.336	170.22	0.258	0.2121	88.386
140.0	8.9296	34.0606	26.396	164.85	0.292	0.2165	88.577
160.0	8.8436	34.0933	26.436	161.48	0.325	0.2284	88.613
180.0	8.7904	34.1017	26.451	160.41	0.357	0.2263	88.611
200.0	8.7071	34.1092	26.470	158.95	0.389	0.2188	88.775
250.0	8.2751	34.1637	26.580	149.32	0.465	0.1945	88.912
300.0	8.1465	34.1792	26.612	147.12	0.539	0.1865	89.085
350.0	7.6655	34.2046	26.703	139.05	0.611	0.1350	89.354
400.0	7.3374	34.1962	26.744	135.77	0.680	0.0809	89.376
450.0	6.6978	34.1783	26.818	128.96	0.747	-0.0215	89.689
500.0	6.2037	34.2557	26.944	117.27	0.809	-0.0254	88.626
505.0	6.1704	34.2598	26.952	116.60	0.815	-0.0264	88.347

**STATION: 49**  
**LAT: 37° 0.4 N**

**DATE: 28-July-1996 0812 UTC**  
**LON: 122° 44.5 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$	%Trans
3.0	13.7476	33.5119	25.090	286.28	0.009	0.6779	83.498
5.0	13.7479	33.5119	25.090	286.34	0.014	0.6779	83.492
10.0	13.7455	33.5165	25.094	286.08	0.029	0.6808	83.423
15.0	13.6887	33.5566	25.137	282.15	0.043	0.7004	83.491
20.0	13.6550	33.6120	25.187	277.54	0.057	0.7369	83.539
25.0	13.4825	33.6143	25.224	274.15	0.071	0.7027	83.367
30.0	13.0049	33.6297	25.332	264.02	0.084	0.6167	84.957
40.0	11.9156	33.6129	25.529	245.47	0.109	0.3888	87.311
50.0	11.1506	33.7807	25.801	219.83	0.133	0.3775	87.451
60.0	10.8429	33.7867	25.860	214.35	0.154	0.3261	87.389
70.0	10.3941	33.8109	25.958	205.26	0.175	0.2653	87.693
80.0	9.7551	33.8743	26.116	190.39	0.195	0.2055	88.303
90.0	9.5772	33.9100	26.173	185.12	0.214	0.2037	88.221
100.0	9.3765	33.9220	26.216	181.27	0.232	0.1799	88.438
120.0	9.3674	33.9949	26.275	176.11	0.268	0.2357	88.044
140.0	8.9265	33.9765	26.331	171.04	0.303	0.1495	88.878
160.0	8.7691	34.0313	26.399	164.95	0.336	0.1676	88.728
180.0	8.6836	34.0639	26.438	161.60	0.369	0.1797	88.514
200.0	8.5315	34.1072	26.496	156.46	0.400	0.1899	88.543
250.0	8.2438	34.1656	26.586	148.72	0.477	0.1913	89.337
300.0	7.8952	34.1934	26.661	142.39	0.550	0.1604	89.294
350.0	7.5213	34.1962	26.718	137.61	0.620	0.1077	89.356
400.0	7.4204	34.2299	26.759	134.45	0.688	0.1192	89.463
450.0	6.9712	34.2125	26.808	130.18	0.755	0.0424	89.609
500.0	6.0907	34.1854	26.903	121.01	0.817	-0.0952	89.686
550.0	5.9451	34.2430	26.968	115.47	0.876	-0.0686	89.618
600.0	5.8466	34.2820	27.011	111.91	0.933	-0.0505	89.428
650.0	5.5402	34.3061	27.068	106.77	0.988	-0.0692	89.448
700.0	5.3238	34.3256	27.110	103.13	1.040	-0.0798	89.364
750.0	5.3504	34.3241	27.106	104.16	1.092	-0.0785	89.364
773.0	5.2326	34.3320	27.126	102.32	1.116	-0.0862	88.758

**STATION: 50**  
**LAT: 36° 59.8 N**

**DATE: 28-July-1996 0901 UTC**  
**LON: 122° 45.9 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$	%Trans
3.0	14.5031	33.6110	25.009	294.02	0.009	0.9175	84.810
5.0	14.5024	33.6111	25.009	294.05	0.015	0.9174	84.686
10.0	14.5037	33.6115	25.009	294.18	0.029	0.9178	84.413
15.0	14.4813	33.6155	25.017	293.57	0.044	0.9159	83.451
20.0	14.3703	33.6147	25.040	291.51	0.059	0.8911	83.862
25.0	14.0758	33.6147	25.102	285.76	0.073	0.8277	85.083
30.0	13.5257	33.6294	25.227	274.03	0.087	0.7236	84.909
40.0	12.1292	33.6626	25.527	245.62	0.113	0.4690	86.882
50.0	11.3963	33.6282	25.637	235.35	0.137	0.3022	88.244
60.0	10.9491	33.6609	25.744	225.46	0.160	0.2457	88.043
70.0	10.6625	33.7436	25.859	214.71	0.183	0.2595	88.393
80.0	10.3539	33.7948	25.953	205.99	0.204	0.2453	88.262
90.0	9.8327	33.8773	26.106	191.60	0.223	0.2208	88.355
100.0	9.5240	33.9015	26.176	185.11	0.242	0.1879	88.542
120.0	9.0844	33.9608	26.293	174.25	0.278	0.1627	88.829
140.0	8.9190	33.9930	26.345	169.71	0.313	0.1613	88.916
160.0	8.7478	34.0224	26.395	165.29	0.346	0.1572	88.996
180.0	8.4995	34.0712	26.472	158.30	0.379	0.1569	88.921
200.0	8.5218	34.1029	26.494	156.64	0.410	0.1850	88.450
250.0	8.0549	34.1679	26.616	145.77	0.485	0.1647	89.327
300.0	7.9248	34.2203	26.677	140.83	0.557	0.1860	89.210
350.0	7.4743	34.2066	26.732	136.16	0.626	0.1092	89.265
400.0	7.2256	34.2169	26.776	132.66	0.693	0.0816	89.372
450.0	6.5971	34.1960	26.846	126.28	0.759	-0.0209	89.594
500.0	6.0892	34.1842	26.902	121.08	0.821	-0.0964	89.604
550.0	5.8202	34.2393	26.980	114.12	0.880	-0.0869	89.609
600.0	5.7285	34.2636	27.011	111.74	0.936	-0.0794	89.544
650.0	5.5366	34.3007	27.064	107.12	0.991	-0.0739	89.357
700.0	5.3207	34.3321	27.115	102.61	1.043	-0.0751	89.443
750.0	5.1659	34.3366	27.137	100.87	1.094	-0.0900	89.592
800.0	4.9446	34.3619	27.183	96.76	1.143	-0.0957	89.555
850.0	4.7777	34.3713	27.210	94.49	1.191	-0.1073	89.531
900.0	4.4875	34.3778	27.247	90.91	1.237	-0.1340	89.521
950.0	4.2583	34.4024	27.292	86.75	1.282	-0.1392	89.604
989.0	4.1910	34.4014	27.298	86.36	1.315	-0.1472	89.097

**STATION: 51**  
**LAT: 37° 0.6 N**

**DATE: 28-July-1996 1136 UTC**  
**LON: 122° 27.3 W**

P (dbar)	T (°C)	S (PSS)	$\gamma_e$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$	%Trans
3.0	13.7683	33.6839	25.219	274.03	0.008	0.8178	81.411
5.0	13.7678	33.6834	25.219	274.11	0.014	0.8172	81.427
10.0	13.7705	33.6842	25.219	274.24	0.027	0.8183	81.422
15.0	13.7202	33.6702	25.218	274.41	0.041	0.7966	81.316
20.0	13.2701	33.5627	25.227	273.76	0.055	0.6184	81.982
25.0	12.4626	33.5732	25.394	257.94	0.068	0.4638	83.665
30.0	12.4736	33.5847	25.401	257.41	0.081	0.4749	83.528
40.0	12.4585	33.5951	25.412	256.61	0.107	0.4799	83.084
50.0	10.6042	33.5331	25.705	228.89	0.131	0.0826	87.877
60.0	10.2708	33.5533	25.778	222.09	0.154	0.0396	88.387
70.0	10.0641	33.5807	25.835	216.91	0.176	0.0253	88.608
80.0	9.7899	33.6552	25.939	207.18	0.197	0.0376	88.850
90.0	9.6723	33.6889	25.985	203.01	0.218	0.0444	88.880
100.0	9.5566	33.8401	26.122	190.17	0.237	0.1448	88.111
113.0	9.1789	33.9189	26.245	178.68	0.261	0.1449	82.552

**STATION: 52**  
**LAT: 36° 57.7 N**

**DATE: 28-July-1996 1226 UTC**  
**LON: 122° 21.5 W**

P (dbar)	T (°C)	S (PSS)	$\gamma_e$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$	%Trans
3.0	12.6344	33.6305	25.405	256.36	0.008	0.5437	83.344
5.0	12.6288	33.6331	25.408	256.11	0.013	0.5446	83.350
10.0	12.5989	33.6312	25.412	255.82	0.026	0.5371	83.297
15.0	12.5775	33.6257	25.412	255.95	0.038	0.5283	83.333
20.0	12.0471	33.5704	25.470	250.53	0.051	0.3811	84.473
25.0	11.2140	33.5397	25.601	238.19	0.063	0.1988	86.638
30.0	11.0644	33.5500	25.636	234.97	0.075	0.1795	87.038
40.0	10.6835	33.6048	25.746	224.70	0.098	0.1538	87.716
50.0	10.2306	33.6991	25.898	210.44	0.120	0.1486	88.542
60.0	9.8702	33.7840	26.026	198.53	0.140	0.1538	87.913
70.0	9.6222	33.8423	26.113	190.46	0.160	0.1580	81.711
80.0	9.5163	33.8786	26.159	186.30	0.179	0.1689	81.741
90.0	9.2838	33.9052	26.217	180.89	0.197	0.1515	78.670
100.0	9.1862	33.9033	26.232	179.71	0.215	0.1340	78.389
120.0	9.0297	33.9403	26.286	174.93	0.251	0.1378	84.421
140.0	8.9412	33.9674	26.321	171.94	0.285	0.1446	84.264
160.0	8.8041	33.9805	26.354	169.25	0.319	0.1330	85.741
180.0	8.5638	34.0615	26.455	159.98	0.353	0.1591	87.236
200.0	8.1009	34.1269	26.576	148.65	0.384	0.1399	88.188
247.0	7.7920	34.1650	26.653	142.14	0.452	0.1237	88.607

**STATION: 53**           **DATE: 28-July-1996 1304 UTC**  
**LAT: 36° 56.9 N**       **LON: 122° 22.5 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$	%Trans
3.0	13.4226	33.6436	25.258	270.29	0.008	0.7140	82.497
5.0	13.4231	33.6440	25.258	270.32	0.014	0.7143	82.480
10.0	13.4155	33.6447	25.261	270.24	0.027	0.7132	82.525
15.0	13.1897	33.6188	25.286	267.95	0.041	0.6462	83.085
20.0	11.8449	33.5637	25.504	247.35	0.053	0.3364	85.295
25.0	11.6321	33.6122	25.581	240.11	0.065	0.3343	85.846
30.0	10.9423	33.5859	25.686	230.25	0.077	0.1857	87.578
40.0	10.5389	33.6237	25.786	220.89	0.100	0.1431	88.413
50.0	10.3680	33.6955	25.872	212.96	0.121	0.1697	88.570
60.0	9.9705	33.7339	25.970	203.84	0.142	0.1312	89.012
70.0	9.8976	33.7826	26.020	199.27	0.163	0.1571	88.826
80.0	9.7231	33.8198	26.079	193.92	0.182	0.1569	86.858
90.0	9.5168	33.8266	26.118	190.35	0.201	0.1277	82.630
100.0	9.2802	33.8797	26.198	182.92	0.220	0.1306	81.605
120.0	9.0385	33.9111	26.262	177.23	0.256	0.1160	84.419
140.0	8.8135	33.9588	26.335	170.64	0.291	0.1176	85.639
160.0	8.7500	33.9810	26.363	168.39	0.325	0.1249	86.599
180.0	8.5947	34.0253	26.422	163.13	0.358	0.1353	87.570
200.0	8.4984	34.0732	26.474	158.49	0.390	0.1579	87.570
250.0	8.1259	34.1306	26.576	149.58	0.467	0.1458	88.431
300.0	7.6311	34.1767	26.686	139.82	0.540	0.1088	88.868
350.0	7.4479	34.1848	26.719	137.41	0.609	0.0882	88.672
400.0	7.1537	34.1992	26.772	132.97	0.677	0.0576	88.525
450.0	6.5428	34.2337	26.883	122.75	0.741	0.0018	88.525
497.0	6.1411	34.2555	26.952	116.42	0.798	-0.0335	87.804

**STATION: 54**           **DATE: 28-July-1996 1409 UTC**  
**LAT: 36° 55.6 N**       **LON: 122° 16.1 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$	%Trans
3.0	11.8269	33.7963	25.687	229.46	0.007	0.5174	80.085
5.0	11.8150	33.7947	25.688	229.42	0.011	0.5138	80.205
10.0	11.7821	33.7920	25.693	229.14	0.023	0.5053	80.574
15.0	11.6994	33.7894	25.706	227.99	0.034	0.4874	81.407
20.0	11.6175	33.7676	25.704	228.26	0.046	0.4546	81.964
25.0	11.5746	33.7621	25.708	228.03	0.057	0.4421	82.318
30.0	11.5728	33.7648	25.711	227.91	0.069	0.4438	82.313
40.0	10.4885	33.7603	25.901	209.96	0.091	0.2425	87.141
50.0	9.9351	33.7775	26.010	199.85	0.111	0.1598	87.099
60.0	9.7616	33.8246	26.076	193.79	0.131	0.1676	84.863
70.0	9.7381	33.8383	26.090	192.59	0.150	0.1743	83.740
80.0	9.7030	33.8511	26.106	191.29	0.169	0.1783	83.027
91.0	9.5891	33.9083	26.170	185.45	0.190	0.2043	81.197

**STATION: 55**           **DATE: 28-July-1996 1445 UTC**  
**LAT: 36° 54.9 N**       **LON: 122° 17.0 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$	%Trans
3.0	12.1921	33.7918	25.615	236.36	0.007	0.5841	78.823
5.0	12.1857	33.7923	25.617	236.25	0.012	0.5832	78.793
10.0	12.0928	33.7910	25.633	234.78	0.024	0.5641	78.762
15.0	11.9391	33.7672	25.644	233.89	0.035	0.5156	80.285
20.0	11.7489	33.7816	25.691	229.56	0.047	0.4905	81.048
25.0	11.6334	33.7811	25.712	227.66	0.058	0.4682	81.650
30.0	11.5217	33.7760	25.729	226.19	0.070	0.4430	82.842
40.0	11.3960	33.7803	25.756	223.89	0.092	0.4228	83.873
50.0	10.1618	33.7738	25.968	203.78	0.113	0.1959	87.926
60.0	9.7782	33.8120	26.063	194.99	0.133	0.1604	87.511
70.0	9.7654	33.8526	26.097	191.96	0.153	0.1902	83.614
80.0	9.4516	33.9043	26.189	183.38	0.171	0.1786	80.330
90.0	9.3520	33.9262	26.223	180.39	0.190	0.1794	78.802
100.0	9.2805	33.9414	26.246	178.34	0.208	0.1795	81.057
120.0	9.1821	33.9739	26.288	174.79	0.243	0.1889	83.960
140.0	8.9923	34.0147	26.350	169.21	0.278	0.1902	87.604
160.0	8.8125	34.0482	26.405	164.35	0.311	0.1879	87.910
180.0	8.6034	34.0801	26.463	159.20	0.343	0.1799	87.899
200.0	8.4375	34.0996	26.504	155.62	0.375	0.1695	88.268
250.0	8.2059	34.1376	26.570	150.23	0.451	0.1635	88.321
257.0	8.1825	34.1423	26.577	149.66	0.461	0.1635	88.134

**STATION: 56**           **DATE: 28-July-1996 1511 UTC**  
**LAT: 36° 54.7 N**       **LON: 122° 17.5 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$	%Trans
3.0	12.2824	33.7827	25.591	238.67	0.007	0.5945	78.741
5.0	12.2840	33.7820	25.590	238.80	0.012	0.5942	78.672
10.0	12.1968	33.7737	25.600	237.95	0.024	0.5705	80.136
15.0	12.0020	33.7319	25.605	237.63	0.036	0.4998	81.619
20.0	11.4693	33.6117	25.610	237.20	0.048	0.3036	84.169
25.0	10.7888	33.6277	25.745	224.45	0.059	0.1912	86.836
30.0	10.9069	33.6823	25.767	222.51	0.070	0.2556	86.477
40.0	11.0357	33.7249	25.778	221.77	0.093	0.3126	85.784
50.0	10.4706	33.7523	25.898	210.46	0.114	0.2329	87.018
60.0	9.7899	33.7813	26.037	197.45	0.135	0.1380	88.235
70.0	9.7169	33.8492	26.102	191.45	0.154	0.1793	84.748
80.0	9.5812	33.8830	26.151	186.99	0.173	0.1832	81.537
90.0	9.4179	33.9141	26.203	182.32	0.191	0.1806	78.726
100.0	9.2332	33.9533	26.263	176.73	0.209	0.1812	81.779
120.0	9.1113	33.9902	26.312	172.49	0.244	0.1903	87.514
140.0	8.8461	34.0391	26.393	165.17	0.278	0.1863	88.389
160.0	8.7535	34.0655	26.428	162.18	0.311	0.1922	88.286
180.0	8.6989	34.0986	26.463	159.26	0.343	0.2095	88.749
200.0	8.5543	34.1074	26.492	156.79	0.375	0.1936	88.650
250.0	8.2481	34.1312	26.559	151.33	0.451	0.1648	88.357
300.0	8.0231	34.1541	26.611	147.17	0.526	0.1483	88.979
350.0	7.8992	34.1697	26.642	145.03	0.599	0.1415	88.604
400.0	7.5738	34.1833	26.701	140.10	0.671	0.1043	88.400
450.0	7.2761	34.1999	26.756	135.39	0.740	0.0745	88.754
499.0	6.7560	34.2202	26.844	127.34	0.804	0.0187	87.039

**STATION: 57**           **DATE: 28-July-1996 1622 UTC**  
**LAT: 36° 53.0 N**       **LON: 122° 10.1 W**

P (dbar)	T (°C)	S (PSS)	$\gamma_e$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$	%Trans
3.0	13.5618	33.7988	25.350	261.56	0.008	0.8650	68.718
5.0	13.5235	33.7976	25.357	260.96	0.013	0.8561	68.574
10.0	12.9894	33.7889	25.457	251.55	0.026	0.7403	70.914
15.0	10.9341	33.7388	25.806	218.47	0.038	0.3057	84.883
20.0	10.6545	33.7587	25.871	212.40	0.049	0.2711	86.518
25.0	10.3346	33.8447	25.994	200.85	0.059	0.2825	88.236
30.0	9.9928	33.8517	26.058	194.88	0.069	0.2289	88.199
40.0	9.6891	33.8848	26.134	187.79	0.088	0.2034	88.240
50.0	9.6931	33.8884	26.137	187.78	0.107	0.2067	87.642
60.0	9.6404	33.9154	26.167	185.14	0.125	0.2191	82.886
70.0	9.4068	33.9180	26.207	181.47	0.144	0.1822	86.328
80.0	9.3195	33.9384	26.237	178.79	0.162	0.1838	77.098
91.0	9.3182	33.9412	26.240	178.77	0.181	0.1857	76.210

**STATION: 58**           **DATE: 28-July-1996 1646 UTC**  
**LAT: 36° 51.5 N**       **LON: 122° 11.3 W**

P (dbar)	T (°C)	S (PSS)	$\gamma_e$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$	%Trans
3.0	13.3959	33.7724	25.363	260.29	0.008	0.8099	75.152
5.0	13.3453	33.7728	25.374	259.34	0.013	0.7998	75.159
10.0	12.9421	33.7451	25.433	253.84	0.026	0.6957	78.120
15.0	12.5025	33.7496	25.523	245.43	0.038	0.6113	79.669
20.0	11.7102	33.7195	25.649	233.49	0.050	0.4345	83.762
25.0	10.7686	33.7600	25.852	214.32	0.062	0.2924	87.215
30.0	10.5672	33.7864	25.908	209.10	0.072	0.2773	87.768
40.0	10.2502	33.8138	25.984	202.06	0.093	0.2431	88.133
50.0	9.6604	33.8247	26.092	191.98	0.112	0.1508	88.629
60.0	9.5005	33.9111	26.186	183.25	0.131	0.1924	88.354
70.0	9.4592	33.9305	26.208	181.36	0.149	0.2007	88.290
80.0	9.3741	33.9433	26.232	179.28	0.167	0.1967	88.032
90.0	9.2266	33.9641	26.273	175.63	0.185	0.1889	86.943
100.0	9.0944	33.9879	26.313	172.02	0.203	0.1861	87.124
120.0	8.8962	34.0373	26.383	165.70	0.236	0.1932	87.849
140.0	8.6927	34.0713	26.442	160.48	0.269	0.1876	88.407
160.0	8.5336	34.0946	26.485	156.72	0.301	0.1809	88.171
180.0	8.4813	34.1014	26.499	155.78	0.332	0.1779	87.937
200.0	8.3803	34.1144	26.525	153.67	0.363	0.1724	87.484
249.0	8.1416	34.1439	26.584	148.81	0.437	0.1587	88.123

**STATION: 59**           **DATE: 28-July-1996 1745 UTC**  
**LAT: 36° 51.9 N**       **LON: 122° 3.3 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$	%Trans
3.0	13.8890	33.7930	25.278	268.38	0.008	0.9290	69.014
5.0	13.5311	33.7327	25.305	265.88	0.013	0.8066	68.007
10.0	12.1533	33.6872	25.541	243.58	0.026	0.4943	78.038
15.0	10.7724	33.6962	25.801	218.90	0.038	0.2427	85.974
20.0	10.4000	33.7759	25.929	206.91	0.048	0.2397	88.025
25.0	10.2850	33.7908	25.960	204.03	0.058	0.2312	88.279
30.0	10.1860	33.8235	26.003	200.09	0.069	0.2398	88.339
40.0	10.0133	33.8505	26.053	195.50	0.088	0.2312	87.987
50.0	9.8722	33.8608	26.085	192.67	0.108	0.2152	88.096
60.0	9.6316	33.9000	26.156	186.13	0.127	0.2055	88.081
70.0	9.5345	33.9201	26.188	183.32	0.145	0.2050	87.773
75.0	9.4183	33.9333	26.217	180.61	0.154	0.1961	79.115

**STATION: 60**           **DATE: 28-July-1996 1810 UTC**  
**LAT: 36° 50.0 N**       **LON: 122° 5.3 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$	%Trans
3.0	13.0252	33.7547	25.424	254.52	0.008	0.7202	77.444
5.0	12.7721	33.7221	25.449	252.22	0.013	0.6434	77.621
10.0	12.0898	33.7576	25.608	237.20	0.025	0.5372	80.728
15.0	11.4062	33.7324	25.716	227.05	0.036	0.3874	83.991
20.0	10.9005	33.7320	25.807	218.52	0.048	0.2942	85.952
25.0	10.1305	33.6818	25.901	209.59	0.058	0.1180	88.172
30.0	9.6917	33.7155	26.001	200.19	0.068	0.0698	88.863
40.0	9.8846	33.8104	26.044	196.41	0.088	0.1775	88.603
50.0	9.8654	33.8871	26.107	190.62	0.108	0.2348	87.659
60.0	9.6370	33.9109	26.164	185.41	0.126	0.2150	85.239
70.0	9.4758	33.9370	26.211	181.14	0.145	0.2086	86.764
80.0	9.3471	33.9491	26.241	178.43	0.163	0.1968	86.910
91.0	9.2311	33.9585	26.268	176.14	0.182	0.1851	87.057

**STATION: 61**  
**LAT: 36° 48.3 N**

**DATE: 28-July-1996 1855 UTC**  
**LON: 121° 59.4 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$	%Trans
3.0	13.7299	33.7932	25.311	265.25	0.008	0.8957	75.066
5.0	13.3457	33.7782	25.378	258.95	0.013	0.8041	74.158
10.0	12.2896	33.7543	25.567	241.07	0.026	0.5734	80.747
15.0	11.3358	33.7240	25.722	226.45	0.037	0.3676	84.162
20.0	10.5963	33.7175	25.849	214.49	0.048	0.2281	87.003
25.0	9.9476	33.6745	25.927	207.19	0.059	0.0808	88.465
30.0	9.7436	33.6861	25.970	203.19	0.069	0.0552	88.659
40.0	9.6483	33.7197	26.012	199.39	0.089	0.0657	88.708
50.0	9.7915	33.7881	26.042	196.77	0.109	0.1439	88.712
60.0	9.8959	33.8858	26.101	191.39	0.128	0.2388	88.182
70.0	9.7339	33.8991	26.139	188.02	0.147	0.2217	88.156
80.0	9.6532	33.9307	26.177	184.59	0.166	0.2330	88.016
90.0	9.5056	33.9225	26.195	183.07	0.184	0.2017	87.868
100.0	9.4566	33.9426	26.219	181.00	0.203	0.2093	83.976
120.0	9.1609	33.9791	26.295	174.07	0.238	0.1896	87.835
140.0	8.9212	34.0251	26.370	167.35	0.272	0.1871	88.483
160.0	8.7468	34.0667	26.430	161.99	0.305	0.1921	88.445
180.0	8.6882	34.0779	26.448	160.63	0.337	0.1914	88.294
200.0	8.4616	34.1022	26.503	155.79	0.369	0.1752	88.526
250.0	8.0872	34.1340	26.585	148.76	0.445	0.1428	88.040
300.0	7.6518	34.1705	26.678	140.58	0.518	0.1069	87.652
350.0	7.4794	34.1757	26.707	138.53	0.587	0.0855	86.462
400.0	6.8871	34.2115	26.818	128.36	0.655	0.0309	86.201
450.0	6.6430	34.2255	26.863	124.71	0.718	0.0085	86.659
479.0	6.5129	34.2300	26.884	123.02	0.754	-0.0055	85.085

**STATION: 62**  
**LAT: 36° 47.4 N**

**DATE: 28-July-1996 1930 UTC**  
**LON: 122° 0.1 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$	%Trans
3.0	13.8513	33.7747	25.272	268.99	0.008	0.9067	77.801
5.0	13.6492	33.7623	25.304	265.99	0.013	0.8545	77.922
10.0	13.1571	33.7665	25.407	256.34	0.026	0.7561	78.333
15.0	12.3522	33.7340	25.540	243.82	0.039	0.5694	81.336
20.0	11.4019	33.6635	25.663	232.18	0.051	0.3320	84.737
25.0	10.9662	33.6500	25.731	225.80	0.062	0.2409	85.845
30.0	10.4984	33.7472	25.889	210.88	0.073	0.2340	87.563
40.0	10.6397	33.8572	25.951	205.28	0.094	0.3460	87.476
50.0	10.3498	33.8657	26.008	200.06	0.114	0.3013	87.939
60.0	10.2285	33.8724	26.034	197.78	0.134	0.2852	87.939
70.0	10.0957	33.8671	26.053	196.20	0.154	0.2580	87.928
80.0	9.7234	33.9002	26.141	187.97	0.173	0.2207	86.909
90.0	9.5672	33.9190	26.182	184.30	0.192	0.2092	87.866
100.0	9.3860	33.9369	26.226	180.32	0.210	0.1932	87.859
120.0	9.2220	33.9689	26.278	175.77	0.245	0.1914	88.257
140.0	9.0037	33.9907	26.330	171.17	0.280	0.1730	87.534
160.0	8.8610	34.0115	26.369	167.81	0.314	0.1665	88.549
180.0	8.7052	34.0569	26.429	162.45	0.347	0.1775	88.822
200.0	8.4862	34.1020	26.499	156.17	0.379	0.1788	88.794
250.0	8.1441	34.1370	26.579	149.37	0.456	0.1536	88.888
300.0	7.7785	34.1685	26.658	142.55	0.529	0.1237	88.780
350.0	7.4255	34.1867	26.724	136.95	0.599	0.0866	88.612
400.0	7.1033	34.2046	26.783	131.87	0.666	0.0549	88.331
450.0	6.6889	34.2256	26.857	125.32	0.731	0.0147	87.588
500.0	6.3722	34.2462	26.915	120.22	0.792	-0.0112	86.883
550.0	6.0533	34.2630	26.970	115.40	0.851	-0.0392	86.072
600.0	5.4671	34.3026	27.074	105.51	0.907	-0.0802	84.389
650.0	5.2450	34.3195	27.114	102.03	0.959	-0.0934	84.009
700.0	5.0641	34.3351	27.147	99.16	1.009	-0.1023	82.428
750.0	4.7817	34.3595	27.199	94.39	1.057	-0.1152	80.198
791.0	4.5449	34.3812	27.243	90.30	1.094	-0.1242	75.761

**STATION: 63**  
**LAT: 36° 46.7 N**

**DATE: 28-July-1996 2019 UTC**  
**LON: 122° 0.4 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$	%Trans
3.0	13.8893	33.7511	25.246	271.47	0.008	0.8962	80.131
5.0	13.3497	33.7098	25.324	264.06	0.013	0.7511	79.134
10.0	12.5672	33.7082	25.478	249.56	0.026	0.5915	79.555
15.0	12.1104	33.7089	25.566	241.28	0.039	0.5025	81.300
20.0	11.5757	33.6572	25.626	235.69	0.050	0.3595	83.926
25.0	10.9164	33.6566	25.745	224.47	0.062	0.2371	85.932
30.0	10.9843	33.8055	25.849	214.71	0.073	0.3673	86.201
40.0	10.7460	33.8588	25.933	206.95	0.094	0.3662	87.572
50.0	10.4971	33.8667	25.983	202.42	0.114	0.3279	87.899
60.0	10.2287	33.8675	26.030	198.14	0.134	0.2814	88.090
70.0	10.2129	33.8779	26.041	197.32	0.154	0.2867	88.005
80.0	9.8803	33.8683	26.090	192.84	0.174	0.2219	88.082
90.0	9.7628	33.8887	26.126	189.64	0.193	0.2180	87.264
100.0	9.5143	33.9169	26.189	183.81	0.212	0.1986	85.324
120.0	9.2523	33.9546	26.262	177.30	0.248	0.1850	87.871
140.0	9.0125	33.9959	26.333	170.92	0.282	0.1786	87.582
160.0	8.8621	34.0204	26.376	167.17	0.316	0.1737	88.479
180.0	8.7069	34.0555	26.428	162.57	0.349	0.1767	88.732
200.0	8.6113	34.0854	26.466	159.27	0.382	0.1851	88.734
250.0	8.2545	34.1275	26.555	151.70	0.459	0.1628	88.712
300.0	7.8433	34.1623	26.644	143.94	0.533	0.1283	88.345
350.0	7.4601	34.1864	26.719	137.46	0.603	0.0913	89.145
400.0	7.1993	34.1989	26.766	133.63	0.671	0.0637	88.710
450.0	6.8182	34.2210	26.836	127.44	0.737	0.0283	88.959
500.0	6.3781	34.2494	26.917	120.06	0.798	-0.0080	89.062
550.0	6.1295	34.2562	26.955	116.91	0.857	-0.0350	88.553
600.0	5.8254	34.2727	27.006	112.33	0.915	-0.0604	85.884
650.0	5.2892	34.3156	27.105	102.88	0.968	-0.0913	84.416
700.0	5.1560	34.3243	27.128	101.11	1.019	-0.1003	84.546
750.0	4.6989	34.3664	27.214	92.87	1.067	-0.1188	80.450
800.0	4.4078	34.3962	27.270	87.62	1.112	-0.1270	78.925
850.0	4.2806	34.4075	27.292	85.73	1.155	-0.1320	77.701
900.0	4.1116	34.4239	27.323	82.95	1.197	-0.1369	75.067
950.0	3.9732	34.4383	27.350	80.67	1.238	-0.1400	71.049
1000.0	3.7368	34.4618	27.392	76.56	1.278	-0.1453	68.267
1003.0	3.7205	34.4642	27.396	76.21	1.280	-0.1449	65.856

**STATION: 64**  
**LAT: 36° 44.9 N**

**DATE: 28-July-1996 2120 UTC**  
**LON: 122° 2.2 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$	%Trans
3.0	14.2746	33.7383	25.155	280.07	0.008	0.9682	79.614
5.0	14.0567	33.7367	25.200	275.89	0.014	0.9203	79.405
10.0	13.4286	33.7382	25.330	263.63	0.027	0.7896	77.564
15.0	12.0225	33.7149	25.588	239.25	0.040	0.4903	81.935
20.0	11.6371	33.7288	25.671	231.48	0.052	0.4277	81.727
25.0	11.4509	33.7611	25.730	225.93	0.063	0.4182	82.569
30.0	11.2463	33.8228	25.816	217.94	0.074	0.4288	85.133
40.0	10.9162	33.8362	25.886	211.50	0.096	0.3789	86.468
50.0	10.5989	33.8056	25.918	208.63	0.117	0.2977	87.421
60.0	10.0771	33.8456	26.039	197.29	0.137	0.2380	87.926
70.0	9.6840	33.8877	26.138	188.07	0.157	0.2043	88.251
80.0	9.5028	33.9051	26.182	184.12	0.175	0.1876	88.277
90.0	9.4238	33.9211	26.207	181.89	0.193	0.1871	88.277
100.0	9.2976	33.9416	26.244	178.59	0.211	0.1824	88.509
120.0	8.9682	33.9379	26.294	174.18	0.247	0.1260	88.965
140.0	8.9204	33.9969	26.348	169.43	0.281	0.1647	88.973
160.0	8.8253	34.0408	26.398	165.10	0.314	0.1840	88.424
180.0	8.7214	34.0571	26.427	162.68	0.347	0.1802	88.406
200.0	8.6390	34.0800	26.458	160.09	0.380	0.1851	88.125
250.0	8.4555	34.1118	26.512	155.85	0.458	0.1811	88.283
300.0	8.0704	34.1499	26.601	148.17	0.534	0.1521	88.133
350.0	7.6410	34.1763	26.685	140.80	0.607	0.1092	87.801
400.0	7.3621	34.1955	26.740	136.17	0.676	0.0839	88.415
450.0	6.9671	34.2117	26.808	130.19	0.743	0.0412	88.531
500.0	6.6614	34.2293	26.864	125.38	0.807	0.0133	88.758
550.0	6.3159	34.2524	26.928	119.67	0.869	-0.0142	88.902
600.0	5.8391	34.2778	27.009	112.12	0.927	-0.0547	87.316
650.0	5.4151	34.3065	27.083	105.14	0.981	-0.0837	86.438
700.0	5.3096	34.3156	27.103	103.70	1.034	-0.0895	86.441
750.0	5.0568	34.3372	27.150	99.46	1.084	-0.1020	84.170
800.0	4.9746	34.3450	27.166	98.38	1.134	-0.1057	83.889
850.0	4.6819	34.3730	27.222	93.17	1.182	-0.1164	83.182
900.0	4.2943	34.4083	27.292	86.29	1.227	-0.1303	81.287
935.0	4.1774	34.4186	27.313	84.44	1.256	-0.1346	80.403

**STATION: 65**  
**LAT: 36° 46.1 N**

**DATE: 28-July-1996 2236 UTC**  
**LON: 122° 7.7 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$	%Trans
3.0	14.0200	33.7559	25.222	273.70	0.008	0.9276	72.502
5.0	13.9415	33.7582	25.241	272.03	0.014	0.9127	71.855
10.0	13.4013	33.7643	25.356	261.18	0.027	0.8045	76.693
15.0	12.9463	33.7670	25.449	252.42	0.040	0.7136	80.700
20.0	11.5558	33.7555	25.706	228.09	0.052	0.4336	85.288
25.0	11.0515	33.7525	25.796	219.67	0.063	0.3376	86.787
30.0	10.6259	33.7324	25.856	214.08	0.074	0.2449	87.643
40.0	10.2418	33.6982	25.896	210.49	0.095	0.1500	88.344
50.0	9.8849	33.7079	25.964	204.21	0.116	0.0961	88.662
60.0	9.7097	33.7679	26.040	197.17	0.136	0.1139	88.959
70.0	9.5671	33.8156	26.101	191.57	0.155	0.1276	88.791
80.0	9.3435	33.8688	26.179	184.33	0.174	0.1326	89.025
90.0	9.3583	33.8890	26.193	183.25	0.192	0.1509	89.066
100.0	9.3230	33.9031	26.210	181.84	0.211	0.1562	89.016
120.0	8.9270	33.9140	26.282	175.32	0.246	0.1005	89.126
140.0	8.5490	33.9431	26.364	167.84	0.281	0.0639	89.202
160.0	8.4051	34.0120	26.440	160.94	0.313	0.0959	89.165
180.0	8.5108	34.1005	26.493	156.29	0.345	0.1818	88.508
200.0	8.4729	34.1119	26.508	155.24	0.376	0.1846	88.907
250.0	8.2490	34.1366	26.563	150.95	0.453	0.1691	89.076
300.0	7.9011	34.1533	26.628	145.45	0.528	0.1296	89.132
350.0	7.6930	34.1766	26.677	141.52	0.599	0.1169	89.101
400.0	7.3243	34.1959	26.746	135.61	0.669	0.0788	89.374
450.0	6.8631	34.1940	26.808	130.05	0.735	0.0131	89.495
500.0	6.7373	34.2280	26.853	126.52	0.799	0.0224	89.306
550.0	6.5237	34.2442	26.895	123.09	0.862	0.0063	88.798
600.0	6.0392	34.2648	26.974	115.72	0.921	-0.0402	89.053
650.0	5.7955	34.2877	27.023	111.44	0.978	-0.0528	89.110
700.0	5.5386	34.2981	27.063	107.92	1.033	-0.0762	87.443
750.0	5.3243	34.3163	27.103	104.40	1.086	-0.0877	86.712
800.0	5.1094	34.3361	27.144	100.74	1.137	-0.0974	88.448
850.0	4.7633	34.3723	27.212	94.23	1.186	-0.1080	88.046
900.0	4.5693	34.3881	27.247	91.15	1.232	-0.1171	86.999
950.0	4.4260	34.4024	27.274	88.81	1.278	-0.1217	86.876
985.0	4.2410	34.4181	27.306	85.70	1.308	-0.1289	86.064

**STATION: 66**  
**LAT: 36° 46.5 N**

**DATE: 28-July-1996 2328 UTC**  
**LON: 122° 7.5 W**

P (dbar)	T (°C)	S (PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$	%Trans
3.0	13.7003	33.7591	25.291	267.17	0.008	0.8627	79.866
5.0	13.6810	33.7568	25.293	267.02	0.013	0.8568	79.731
10.0	13.3896	33.7614	25.356	261.16	0.027	0.7997	74.104
15.0	13.3170	33.7596	25.370	260.02	0.040	0.7833	73.899
20.0	13.1239	33.7575	25.407	256.61	0.052	0.7420	74.415
25.0	12.3678	33.7520	25.551	243.02	0.065	0.5864	82.760
30.0	11.1459	33.7425	25.771	222.13	0.077	0.3469	86.350
40.0	10.5950	33.7127	25.846	215.23	0.098	0.2236	87.778
50.0	10.1514	33.6839	25.900	210.28	0.120	0.1228	88.419
60.0	9.8329	33.7411	25.999	201.11	0.140	0.1135	88.835
70.0	9.4992	33.8074	26.106	191.12	0.160	0.1099	88.924
80.0	9.3711	33.8833	26.186	183.68	0.179	0.1487	88.993
90.0	9.0696	33.8873	26.238	178.93	0.197	0.1026	89.060
100.0	9.0243	33.9084	26.262	176.85	0.214	0.1119	89.066
120.0	8.7600	33.9659	26.348	168.94	0.249	0.1151	88.997
140.0	8.6723	34.0336	26.415	162.97	0.282	0.1546	89.058
160.0	8.6640	34.0705	26.446	160.45	0.314	0.1822	88.592
180.0	8.5382	34.1015	26.490	156.62	0.346	0.1868	88.801
200.0	8.4808	34.1128	26.508	155.28	0.377	0.1865	88.869
250.0	8.2684	34.1327	26.557	151.53	0.454	0.1690	88.969
300.0	7.9014	34.1683	26.640	144.34	0.528	0.1415	88.797
350.0	7.5982	34.1949	26.705	138.81	0.599	0.1176	89.248
400.0	7.2471	34.2004	26.760	134.19	0.667	0.0716	89.238
450.0	6.9353	34.2192	26.819	129.19	0.733	0.0427	88.947
500.0	6.6300	34.2381	26.875	124.30	0.796	0.0161	88.946
550.0	6.2846	34.2563	26.935	118.96	0.857	-0.0151	89.076
600.0	6.0749	34.2654	26.970	116.15	0.916	-0.0352	88.766
641.0	5.8433	34.2797	27.010	112.55	0.963	-0.0532	87.466

**STATION: 67**  
**LAT: 36° 47.0 N**

**DATE: 29-July-1996 0005 UTC**  
**LON: 122° 7.3 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$	%Trans
3.0	13.4697	33.7684	25.345	262.01	0.008	0.8220	76.627
5.0	13.4366	33.7687	25.352	261.40	0.013	0.8154	76.372
10.0	13.0982	33.7551	25.410	256.05	0.026	0.7352	73.978
15.0	12.7428	33.7459	25.473	250.16	0.039	0.6561	77.242
20.0	12.2175	33.7000	25.539	244.03	0.051	0.5165	81.242
25.0	11.0417	33.7070	25.762	222.87	0.063	0.2998	85.481
30.0	10.9810	33.7122	25.777	221.56	0.074	0.2928	85.924
40.0	10.5938	33.6910	25.829	216.82	0.096	0.2062	87.438
50.0	10.1909	33.6806	25.891	211.16	0.117	0.1270	88.455
60.0	9.8700	33.7113	25.969	203.92	0.138	0.0960	88.768
70.0	9.7827	33.7715	26.031	198.25	0.158	0.1289	88.799
80.0	9.4760	33.8028	26.106	191.28	0.177	0.1022	88.992
90.0	9.3193	33.8852	26.196	182.93	0.196	0.1415	88.993
100.0	9.0764	33.9121	26.256	177.37	0.214	0.1232	89.026
120.0	8.8731	33.9815	26.343	169.50	0.249	0.1453	89.014
140.0	8.7257	34.0368	26.410	163.53	0.282	0.1655	88.932
160.0	8.6897	34.0608	26.434	161.56	0.315	0.1785	88.359
180.0	8.5361	34.0967	26.487	156.95	0.347	0.1827	88.393
200.0	8.5148	34.1037	26.496	156.47	0.378	0.1846	88.438
250.0	8.2955	34.1207	26.543	152.81	0.455	0.1636	88.437
300.0	7.8629	34.1597	26.639	144.42	0.530	0.1291	88.433
350.0	7.5742	34.1943	26.708	138.51	0.600	0.1137	89.027
400.0	7.2522	34.1979	26.757	134.44	0.668	0.0703	88.283
450.0	6.8743	34.2186	26.826	128.39	0.733	0.0340	88.413
500.0	6.7006	34.2286	26.858	125.97	0.797	0.0180	88.318
503.0	6.6939	34.2277	26.858	125.99	0.800	0.0163	88.447

**STATION: 68**  
**LAT: 36° 50.3 N**

**DATE: 29-July-1996 0108 UTC**  
**LON: 122° 12.3 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$	%Trans
3.0	14.0445	33.7804	25.236	272.39	0.008	0.9521	66.136
5.0	13.7603	33.7558	25.276	268.64	0.014	0.8726	68.339
10.0	12.2796	33.7162	25.540	243.69	0.026	0.5413	77.125
15.0	11.8039	33.7032	25.620	236.20	0.038	0.4392	80.097
20.0	10.8709	33.7397	25.818	217.45	0.050	0.2950	86.034
25.0	10.5243	33.7593	25.894	210.30	0.060	0.2483	86.930
30.0	10.2908	33.7646	25.939	206.16	0.071	0.2114	87.272
40.0	9.6901	33.8141	26.079	193.04	0.091	0.1476	88.229
50.0	9.6140	33.8302	26.104	190.85	0.110	0.1474	88.163
60.0	9.4519	33.8933	26.180	183.81	0.129	0.1703	88.313
70.0	9.4512	33.9309	26.210	181.21	0.147	0.1997	88.247
80.0	9.3851	33.9395	26.228	179.73	0.165	0.1954	88.029
90.0	9.3487	33.9452	26.238	178.93	0.183	0.1938	87.831
100.0	9.1664	33.9635	26.282	174.94	0.200	0.1785	86.426
120.0	8.9750	33.9787	26.325	171.25	0.235	0.1593	87.896
140.0	8.8755	34.0434	26.391	165.31	0.269	0.1943	88.297
160.0	8.8433	34.0600	26.410	163.95	0.302	0.2020	88.448
180.0	8.7211	34.0685	26.436	161.83	0.334	0.1892	88.467
200.0	8.6710	34.0790	26.452	160.64	0.366	0.1893	88.459
250.0	8.3904	34.1181	26.527	154.41	0.445	0.1761	88.491
300.0	8.1075	34.1520	26.597	148.57	0.521	0.1592	88.850
350.0	7.6430	34.1887	26.694	139.91	0.594	0.1192	89.047
400.0	7.0413	34.1869	26.778	132.32	0.661	0.0324	89.217
450.0	6.8613	34.2204	26.829	128.08	0.726	0.0337	88.965
500.0	6.4627	34.2435	26.901	121.63	0.788	-0.0016	88.856
550.0	6.1601	34.2600	26.954	117.03	0.848	-0.0281	88.756
589.0	5.6615	34.2975	27.046	108.23	0.892	-0.0607	88.780

STATION: 69  
LAT: 36° 49.1 N

DATE: 29-July-1996 0150 UTC  
LON: 122° 13.5 W

P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$	%Trans
3.0	14.2322	33.7840	25.200	275.86	0.008	0.9950	69.461
5.0	14.1073	33.7825	25.225	273.53	0.014	0.9670	69.805
10.0	11.9895	33.7436	25.616	236.44	0.026	0.5069	79.417
15.0	11.5493	33.7644	25.714	227.19	0.038	0.4394	82.329
20.0	10.7723	33.7572	25.849	214.49	0.049	0.2910	85.852
25.0	10.2299	33.7559	25.942	205.71	0.059	0.1940	87.115
30.0	9.9093	33.8013	26.032	197.27	0.069	0.1748	87.993
40.0	9.6842	33.8390	26.099	191.10	0.089	0.1663	88.300
50.0	9.5608	33.8724	26.146	186.88	0.108	0.1720	88.378
60.0	9.4515	33.9126	26.195	182.38	0.126	0.1855	88.532
70.0	9.3449	33.9353	26.231	179.22	0.144	0.1857	88.378
80.0	9.3009	33.9542	26.253	177.33	0.162	0.1933	87.878
90.0	9.2361	33.9630	26.270	175.87	0.180	0.1895	87.523
100.0	9.1793	33.9805	26.293	173.87	0.197	0.1940	86.749
120.0	9.0317	34.0028	26.335	170.33	0.231	0.1875	87.817
140.0	8.9569	34.0084	26.351	169.14	0.265	0.1796	87.776
160.0	8.8219	34.0326	26.392	165.65	0.299	0.1770	87.294
180.0	8.7183	34.0742	26.441	161.36	0.332	0.1933	88.613
200.0	8.6318	34.0840	26.462	159.69	0.364	0.1871	88.710
250.0	8.2570	34.1315	26.557	151.45	0.442	0.1663	89.035
300.0	7.9767	34.1665	26.627	145.57	0.516	0.1512	89.147
350.0	7.6327	34.2095	26.712	138.22	0.587	0.1342	89.465
400.0	6.7234	34.1551	26.796	130.33	0.654	-0.0358	89.557
450.0	6.8103	34.2098	26.828	128.16	0.719	0.0184	89.454
500.0	6.5210	34.2315	26.884	123.31	0.782	-0.0035	89.148
550.0	5.9284	34.2655	26.987	113.58	0.841	-0.0528	88.996
600.0	5.7218	34.2860	27.030	110.00	0.897	-0.0626	89.134
650.0	5.5629	34.3065	27.066	107.03	0.951	-0.0661	89.198
700.0	5.1796	34.3334	27.133	100.73	1.004	-0.0904	88.668
750.0	5.0156	34.3535	27.168	97.73	1.054	-0.0938	88.507
763.0	4.9604	34.3543	27.175	97.12	1.066	-0.0995	88.470

**STATION: 70**  
**LAT: 36° 53.2 N**

**DATE: 28-July-1996 0308 UTC**  
**LON: 122° 19.2 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$	%Trans
3.0	12.6264	33.6940	25.455	251.53	0.008	0.5923	79.656
5.0	12.6109	33.6928	25.457	251.38	0.013	0.5882	79.811
10.0	12.6073	33.6801	25.448	252.37	0.025	0.5774	79.866
15.0	12.2730	33.6132	25.461	251.28	0.038	0.4585	81.849
20.0	11.8493	33.6125	25.541	243.83	0.050	0.3760	84.329
25.0	11.4606	33.6415	25.635	234.94	0.062	0.3253	85.374
30.0	10.8872	33.6568	25.750	224.10	0.074	0.2323	86.314
40.0	10.3612	33.7187	25.891	210.92	0.095	0.1871	88.289
50.0	9.9769	33.7660	25.994	201.38	0.116	0.1579	88.832
60.0	9.8286	33.8073	26.051	196.14	0.136	0.1651	88.613
70.0	9.7477	33.8216	26.076	193.98	0.155	0.1627	86.023
80.0	9.5296	33.8354	26.123	189.70	0.174	0.1370	85.202
90.0	9.2241	33.8795	26.207	181.87	0.193	0.1215	84.256
100.0	9.1005	33.9004	26.243	178.61	0.211	0.1178	85.756
120.0	9.0977	33.9576	26.289	174.69	0.246	0.1623	84.867
140.0	8.9862	34.0201	26.356	168.72	0.281	0.1935	87.917
160.0	8.8360	34.0916	26.436	161.49	0.314	0.2258	88.711
180.0	8.7281	34.1214	26.476	158.01	0.346	0.2320	88.911
200.0	8.6240	34.1318	26.501	156.03	0.377	0.2236	88.986
250.0	8.1586	34.1436	26.582	149.09	0.454	0.1610	89.091
300.0	7.9044	34.1645	26.636	144.67	0.528	0.1389	89.045
350.0	7.5817	34.2003	26.712	138.16	0.598	0.1196	89.129
400.0	7.1495	34.2101	26.781	132.10	0.666	0.0657	88.766
450.0	6.7659	34.2334	26.853	125.80	0.730	0.0311	88.911
500.0	6.4978	34.2504	26.902	121.60	0.792	0.0084	88.874
550.0	6.1759	34.2689	26.959	116.58	0.852	-0.0191	88.844
600.0	5.9180	34.2859	27.005	112.56	0.909	-0.0387	88.781
650.0	5.5184	34.3088	27.073	106.29	0.964	-0.0697	88.590
700.0	5.2134	34.3281	27.125	101.55	1.016	-0.0907	88.134
707.0	5.1761	34.3305	27.131	100.98	1.023	-0.0932	87.582

**STATION: 71**  
**LAT: 36° 56.5 N**

**DATE: 29-July-1996 0439 UTC**  
**LON: 122° 23.1 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$	%Trans
3.0	13.5231	33.6913	25.275	268.72	0.008	0.7724	76.135
5.0	13.5156	33.6927	25.277	268.52	0.013	0.7719	76.455
10.0	13.2466	33.6814	25.323	264.31	0.027	0.7073	77.420
15.0	12.9813	33.6747	25.371	259.88	0.040	0.6479	78.072
20.0	12.6634	33.6324	25.401	257.17	0.053	0.5506	79.831
25.0	11.5002	33.5546	25.561	242.05	0.065	0.2639	84.675
30.0	10.7301	33.5292	25.679	230.87	0.077	0.1024	87.102
40.0	10.1680	33.6124	25.841	215.64	0.099	0.0691	88.372
50.0	10.1327	33.7658	25.967	203.90	0.120	0.1845	88.535
60.0	9.9195	33.8241	26.049	196.35	0.140	0.1939	88.785
70.0	9.6593	33.8473	26.110	190.68	0.160	0.1681	88.906
80.0	9.5854	33.8707	26.141	187.97	0.179	0.1741	88.877
90.0	9.5354	33.9141	26.183	184.16	0.197	0.2000	88.689
100.0	9.4314	33.9319	26.215	181.39	0.215	0.1968	88.372
120.0	9.3301	33.9566	26.251	178.37	0.251	0.1992	87.154
140.0	9.0384	33.9566	26.298	174.23	0.287	0.1516	84.809
160.0	8.9406	33.9904	26.340	170.59	0.321	0.1624	86.175
180.0	8.8212	34.0596	26.413	164.00	0.355	0.1979	88.203
200.0	8.6448	34.1017	26.474	158.57	0.387	0.2031	88.330
250.0	8.1889	34.1504	26.582	149.04	0.463	0.1710	88.840
300.0	7.8749	34.1691	26.644	143.90	0.536	0.1382	88.596
350.0	7.7743	34.1751	26.665	142.81	0.608	0.1275	88.592
400.0	7.5492	34.1893	26.709	139.31	0.679	0.1055	88.576
450.0	7.1440	34.2000	26.775	133.52	0.747	0.0562	88.404
500.0	6.8732	34.2148	26.824	129.38	0.813	0.0302	88.747
550.0	6.4659	34.2377	26.897	122.78	0.876	-0.0064	88.794
600.0	6.1319	34.2576	26.956	117.48	0.936	-0.0342	88.389
650.0	5.7671	34.2827	27.022	111.44	0.993	-0.0602	88.465
700.0	5.4820	34.3064	27.076	106.58	1.047	-0.0764	87.934
750.0	5.2646	34.3257	27.117	102.94	1.099	-0.0872	88.361
800.0	5.0570	34.3437	27.156	99.51	1.150	-0.0973	87.152
809.0	4.9282	34.3555	27.180	97.11	1.159	-0.1026	86.746

**STATION: 73**  
**LAT: 36° 58.8 N**

**DATE: 29-July-1996 0600 UTC**  
**LON: 122° 30.2 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$	%Trans
3.0	13.5270	33.5717	25.181	277.59	0.008	0.6789	80.799
5.0	13.5270	33.5719	25.182	277.63	0.014	0.6790	80.791
10.0	13.4727	33.5639	25.187	277.29	0.028	0.6613	81.273
15.0	13.3386	33.5480	25.202	276.01	0.042	0.6209	81.764
20.0	12.7344	33.4858	25.273	269.29	0.055	0.4488	83.960
25.0	11.5865	33.4433	25.450	252.52	0.068	0.1838	85.490
30.0	11.0279	33.4462	25.562	242.03	0.081	0.0903	86.255
40.0	10.6336	33.6476	25.788	220.70	0.104	0.1789	87.857
50.0	10.1900	33.7463	25.942	206.28	0.125	0.1790	88.637
60.0	9.9205	33.8064	26.035	197.67	0.145	0.1801	88.815
70.0	9.7372	33.8450	26.096	192.08	0.165	0.1794	88.807
80.0	9.6565	33.8563	26.118	190.16	0.184	0.1746	88.786
90.0	9.5422	33.8896	26.163	186.08	0.203	0.1818	88.677
100.0	9.4037	33.9454	26.230	179.97	0.221	0.2028	88.626
120.0	9.2670	33.9743	26.275	176.07	0.256	0.2030	88.436
140.0	9.2214	33.9920	26.296	174.43	0.291	0.2092	88.456
160.0	9.0394	34.0314	26.356	169.07	0.326	0.2106	88.445
180.0	8.9123	34.0611	26.400	165.28	0.359	0.2135	88.479
200.0	8.7612	34.0758	26.436	162.26	0.392	0.2009	88.555
245.0	8.3632	34.1626	26.566	150.63	0.463	0.2071	87.919

**STATION: 74**  
**LAT: 36° 57.5 N**

**DATE: 29-July-1996 0637 UTC**  
**LON: 122° 31.9 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$	%Trans
3.0	13.4789	33.5056	25.140	281.53	0.008	0.6167	83.010
5.0	13.4775	33.5056	25.140	281.55	0.014	0.6164	83.011
10.0	13.4286	33.5033	25.149	280.91	0.028	0.6043	83.257
15.0	13.0811	33.4826	25.202	275.92	0.042	0.5164	83.731
20.0	12.9496	33.4945	25.238	272.68	0.056	0.4990	83.662
25.0	12.6861	33.4690	25.270	269.75	0.069	0.4257	84.009
30.0	11.3300	33.3814	25.457	252.03	0.082	0.0948	86.013
40.0	10.6035	33.5136	25.689	230.11	0.106	0.0671	87.939
50.0	10.3163	33.7102	25.892	211.02	0.129	0.1723	88.559
60.0	10.2842	33.7400	25.921	208.49	0.150	0.1901	88.696
70.0	9.9996	33.7962	26.014	199.90	0.170	0.1853	88.868
80.0	9.7971	33.8490	26.089	192.94	0.190	0.1925	88.872
90.0	9.4851	33.9224	26.198	182.75	0.208	0.1983	88.559
100.0	9.4212	33.9556	26.235	179.48	0.226	0.2138	88.377
120.0	9.2938	34.0207	26.307	173.05	0.262	0.2440	88.353
140.0	9.0800	34.0551	26.368	167.56	0.296	0.2362	88.493
160.0	8.9636	34.0884	26.413	163.68	0.329	0.2435	88.075
180.0	8.8870	34.1125	26.444	161.09	0.362	0.2500	88.272
200.0	8.7914	34.1331	26.476	158.46	0.394	0.2509	88.533
250.0	8.3526	34.1799	26.581	149.27	0.471	0.2190	89.031
300.0	8.1938	34.2010	26.622	146.21	0.545	0.2109	89.026
350.0	7.7412	34.2195	26.704	139.04	0.616	0.1577	89.189
400.0	7.2892	34.2017	26.755	134.68	0.684	0.0785	89.275
450.0	6.6774	34.1915	26.831	127.70	0.750	-0.0138	89.157
487.0	6.5890	34.2243	26.869	124.59	0.797	-0.0001	88.699

**STATION: 75**  
**LAT: 36° 56.3 N**

**DATE: 29-July-1996 0715 UTC**  
**LON: 122° 32.9 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$	%Trans
3.0	13.7078	33.5318	25.114	284.04	0.009	0.6852	83.746
5.0	13.7068	33.5318	25.114	284.07	0.014	0.6849	83.679
10.0	13.5121	33.5563	25.173	278.63	0.028	0.6636	82.848
15.0	12.8463	33.4918	25.256	270.82	0.042	0.4761	83.945
20.0	12.2861	33.4827	25.357	261.29	0.055	0.3578	84.352
25.0	11.0630	33.5298	25.620	236.34	0.068	0.1632	86.608
30.0	10.9248	33.5702	25.677	231.11	0.079	0.1700	87.581
40.0	10.4662	33.7028	25.861	213.83	0.102	0.1929	88.397
50.0	10.3455	33.7234	25.898	210.52	0.123	0.1879	88.634
60.0	10.2207	33.7425	25.934	207.26	0.144	0.1811	88.728
70.0	10.0140	33.7943	26.010	200.27	0.164	0.1863	88.793
80.0	9.8698	33.8290	26.061	195.58	0.184	0.1890	88.887
90.0	9.5870	33.9073	26.170	185.47	0.203	0.2033	88.367
100.0	9.4167	33.9477	26.229	180.00	0.221	0.2068	80.835
120.0	9.2014	34.0409	26.337	170.12	0.256	0.2449	88.396
140.0	9.1372	34.0613	26.364	167.99	0.290	0.2503	88.465
160.0	8.9888	34.0970	26.416	163.42	0.323	0.2544	88.414
180.0	8.8979	34.1221	26.450	160.54	0.356	0.2594	88.697
200.0	8.7153	34.1404	26.493	156.77	0.387	0.2447	88.530
250.0	8.4626	34.1682	26.555	151.79	0.464	0.2266	88.728
300.0	8.2563	34.2102	26.620	146.46	0.539	0.2275	89.144
350.0	8.0503	34.2364	26.672	142.31	0.611	0.2165	89.184
400.0	7.4891	34.2020	26.727	137.50	0.681	0.1070	89.220
450.0	7.2036	34.2193	26.782	132.93	0.749	0.0798	89.265
500.0	6.6435	34.2071	26.849	126.78	0.814	-0.0065	89.513
550.0	6.2377	34.2270	26.918	120.51	0.875	-0.0443	89.089
600.0	6.0443	34.2684	26.976	115.52	0.935	-0.0366	88.840
650.0	5.7424	34.2998	27.039	109.85	0.991	-0.0498	88.920
700.0	5.3524	34.3326	27.112	102.98	1.044	-0.0710	88.743
750.0	5.0756	34.3563	27.163	98.28	1.094	-0.0848	88.622
800.0	4.8181	34.3843	27.215	93.51	1.142	-0.0921	88.759
819.0	4.7861	34.3871	27.221	93.10	1.160	-0.0936	88.802

**STATION: 76**  
**LAT: 36° 55.8 N**

**DATE: 29-July-1996 0803 UTC**  
**LON: 122° 33.5 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$	%Trans
3.0	13.7769	33.5596	25.121	283.34	0.009	0.7217	83.624
5.0	13.7836	33.5631	25.122	283.27	0.014	0.7258	83.594
10.0	13.7515	33.5798	25.142	281.54	0.028	0.7321	83.326
15.0	12.9706	33.5014	25.239	272.44	0.042	0.5088	84.024
20.0	12.4184	33.4865	25.335	263.41	0.056	0.3866	84.400
25.0	11.3021	33.5322	25.579	240.26	0.068	0.2092	86.141
30.0	10.9455	33.5724	25.675	231.29	0.080	0.1756	87.531
40.0	10.3943	33.7123	25.880	211.94	0.102	0.1879	88.396
50.0	10.2706	33.7347	25.919	208.46	0.123	0.1837	88.600
60.0	10.1311	33.7717	25.972	203.64	0.144	0.1887	88.698
70.0	9.9043	33.8130	26.043	197.12	0.164	0.1823	88.845
80.0	9.6971	33.8719	26.124	189.65	0.183	0.1939	88.761
90.0	9.5637	33.9139	26.179	184.62	0.202	0.2046	88.390
100.0	9.5050	33.9425	26.211	181.77	0.220	0.2173	88.289
120.0	9.3550	34.0044	26.284	175.21	0.256	0.2412	88.034
140.0	9.1930	34.0466	26.343	169.94	0.290	0.2477	88.429
160.0	9.0299	34.0886	26.403	164.68	0.324	0.2543	88.600
180.0	8.9680	34.1040	26.425	162.96	0.356	0.2562	88.743
200.0	8.8308	34.1323	26.469	159.12	0.388	0.2565	88.729
250.0	8.4297	34.1631	26.556	151.67	0.466	0.2176	88.739
300.0	8.1845	34.1852	26.611	147.24	0.541	0.1970	89.128
350.0	8.0258	34.2375	26.677	141.87	0.612	0.2137	89.204
400.0	7.7272	34.2420	26.725	137.98	0.682	0.1727	89.292
450.0	7.1376	34.2188	26.791	132.04	0.750	0.0702	89.191
500.0	6.6670	34.2032	26.843	127.39	0.815	-0.0066	89.374
550.0	6.1420	34.1850	26.897	122.36	0.878	-0.0897	89.437
600.0	5.8884	34.2235	26.960	116.80	0.938	-0.0915	89.501
650.0	5.9065	34.2843	27.006	113.15	0.995	-0.0418	88.932
700.0	5.3720	34.3284	27.106	103.54	1.048	-0.0721	88.840
750.0	5.0725	34.3527	27.161	98.50	1.099	-0.0880	88.857
800.0	4.8515	34.3817	27.209	94.12	1.147	-0.0905	89.054
850.0	4.7183	34.3941	27.235	92.05	1.193	-0.0958	89.065
900.0	4.5423	34.4071	27.265	89.42	1.239	-0.1051	88.761
950.0	4.4280	34.4154	27.284	87.87	1.283	-0.1112	88.518
975.0	4.2766	34.4236	27.307	85.64	1.305	-0.1208	88.204

STATION: 77  
LAT: 36° 53.5 N

DATE: 29-July-1996 0938 UTC  
LON: 122° 26.0 W

P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma \Delta D$	$\pi$	%Trans
3.0	13.7561	33.6832	25.221	273.85	0.008	0.8147	75.967
5.0	13.7561	33.6840	25.221	273.84	0.014	0.8153	75.938
10.0	13.6883	33.6779	25.231	273.09	0.027	0.7961	76.437
15.0	13.2917	33.6069	25.257	270.77	0.041	0.6577	79.766
20.0	12.5114	33.5293	25.350	261.96	0.054	0.4389	84.626
25.0	11.4230	33.5606	25.579	240.26	0.067	0.2542	86.449
30.0	10.8705	33.5719	25.688	230.07	0.079	0.1616	87.382
40.0	10.4203	33.6878	25.857	214.19	0.101	0.1730	88.175
50.0	10.2434	33.7369	25.926	207.85	0.122	0.1807	88.435
60.0	10.0550	33.7869	25.997	201.28	0.142	0.1877	88.719
70.0	9.9362	33.8106	26.036	197.81	0.162	0.1859	88.820
80.0	9.7352	33.8471	26.098	192.09	0.182	0.1805	88.861
90.0	9.6487	33.8625	26.124	189.77	0.201	0.1781	88.892
100.0	9.4293	33.9465	26.226	180.28	0.220	0.2079	88.672
120.0	9.0641	33.9799	26.311	172.53	0.255	0.1745	88.764
140.0	8.9387	34.0150	26.359	168.37	0.289	0.1819	88.773
160.0	8.8734	34.0476	26.395	165.33	0.322	0.1969	88.757
180.0	8.8112	34.0740	26.426	162.78	0.355	0.2077	88.740
200.0	8.6998	34.0846	26.452	160.67	0.387	0.1983	88.826
250.0	8.4340	34.1243	26.525	154.61	0.466	0.1875	88.943
300.0	8.3211	34.1796	26.586	149.69	0.542	0.2132	89.107
350.0	7.7863	34.1880	26.673	142.02	0.615	0.1395	89.181
400.0	7.5419	34.2068	26.724	137.90	0.685	0.1183	89.156
450.0	7.1168	34.1959	26.775	133.44	0.753	0.0492	89.316
500.0	6.5093	34.1868	26.850	126.47	0.818	-0.0403	89.277
550.0	6.2366	34.2578	26.942	118.22	0.880	-0.0202	88.657
600.0	5.9588	34.2775	26.994	113.72	0.937	-0.0402	88.923
650.0	5.5433	34.3074	27.069	106.71	0.993	-0.0678	88.947
700.0	5.1946	34.3380	27.135	100.58	1.044	-0.0851	89.167
750.0	5.0275	34.3471	27.162	98.35	1.093	-0.0975	88.713
800.0	4.8119	34.3699	27.205	94.50	1.141	-0.1041	88.901
850.0	4.6848	34.3755	27.224	93.02	1.188	-0.1141	88.553
900.0	4.4856	34.3940	27.260	89.69	1.234	-0.1215	87.993
950.0	4.3219	34.4086	27.290	87.07	1.278	-0.1276	87.632
1000.0	4.0866	34.4326	27.334	82.88	1.320	-0.1334	87.776
1023.0	3.9686	34.4434	27.355	80.86	1.339	-0.1370	87.418

**STATION: 78**  
**LAT: 36° 50.0 N**

**DATE: 29-July-1996 1105 UTC**  
**LON: 122° 21.7 W**

P (dbar)	T (°C)	S (PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$	%Trans
3.0	13.4581	33.6960	25.292	267.11	0.008	0.7626	81.138
5.0	13.4580	33.6960	25.292	267.16	0.013	0.7625	81.116
10.0	12.9431	33.5775	25.302	266.29	0.027	0.5644	82.845
15.0	11.2965	33.5295	25.578	240.15	0.039	0.2062	86.340
20.0	11.1039	33.5962	25.665	232.02	0.051	0.2235	86.842
25.0	10.9864	33.6458	25.724	226.45	0.063	0.2413	87.733
30.0	10.5807	33.6813	25.824	217.12	0.074	0.1964	88.234
40.0	10.2310	33.7649	25.950	205.37	0.095	0.2010	88.542
50.0	9.9749	33.8064	26.026	198.34	0.115	0.1896	88.740
60.0	9.8185	33.8342	26.074	193.98	0.135	0.1848	88.736
70.0	9.6040	33.8780	26.144	187.53	0.154	0.1832	88.730
80.0	9.5081	33.9119	26.186	183.70	0.172	0.1939	88.694
90.0	9.4443	33.9597	26.234	179.34	0.190	0.2211	88.538
100.0	9.2937	33.9835	26.277	175.43	0.208	0.2149	88.573
120.0	9.0870	34.0202	26.339	169.88	0.243	0.2102	88.792
140.0	8.8530	34.0386	26.391	165.32	0.276	0.1869	88.821
160.0	8.7437	34.0616	26.427	162.32	0.309	0.1876	88.812
180.0	8.7692	34.0901	26.445	160.95	0.341	0.2138	88.866
200.0	8.5715	34.0831	26.471	158.85	0.373	0.1770	88.840
250.0	8.4672	34.1563	26.545	152.74	0.451	0.2179	88.940
300.0	7.9480	34.1759	26.639	144.45	0.526	0.1544	88.883
350.0	7.6698	34.1741	26.679	141.37	0.597	0.1116	89.165
400.0	7.4663	34.1950	26.725	137.70	0.667	0.0982	89.419
450.0	6.5309	34.1475	26.816	128.99	0.734	-0.0679	89.463
500.0	6.4504	34.1931	26.863	125.21	0.797	-0.0430	89.344
550.0	6.2317	34.2551	26.941	118.34	0.858	-0.0228	89.171
600.0	5.8426	34.2801	27.010	112.00	0.916	-0.0525	88.910
650.0	5.5034	34.3058	27.072	106.31	0.970	-0.0738	88.951
700.0	5.3247	34.3297	27.113	102.84	1.023	-0.0766	89.254
750.0	5.1294	34.3474	27.150	99.62	1.074	-0.0857	89.375
800.0	4.9133	34.3746	27.197	95.42	1.122	-0.0892	89.240
850.0	4.7241	34.3913	27.232	92.34	1.169	-0.0975	89.184
900.0	4.5338	34.3971	27.258	90.04	1.214	-0.1139	88.930
950.0	4.4173	34.4025	27.275	88.69	1.259	-0.1225	88.277
1000.0	4.2411	34.4200	27.308	85.69	1.303	-0.1275	88.218
1023.0	4.0920	34.4334	27.334	83.09	1.322	-0.1325	87.729

**STATION: 79**  
**LAT: 36° 46.8 N**

**DATE: 29-July-1996 1242 UTC**  
**LON: 122° 15.4 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$	%Trans
3.0	13.3973	33.7657	25.358	260.81	0.008	0.8049	78.462
5.0	13.3537	33.7515	25.356	261.07	0.013	0.7847	78.838
10.0	12.6234	33.7248	25.480	249.38	0.026	0.6159	81.251
15.0	11.8973	33.7181	25.614	236.77	0.038	0.4688	80.819
20.0	11.5786	33.7654	25.710	227.74	0.049	0.4456	81.438
25.0	11.2887	33.7533	25.754	223.69	0.061	0.3819	83.469
30.0	10.7911	33.7568	25.846	215.05	0.072	0.2938	85.826
40.0	10.0252	33.7851	26.000	200.54	0.093	0.1815	87.693
50.0	9.8695	33.8041	26.041	196.83	0.112	0.1697	87.930
60.0	9.5993	33.8648	26.134	188.24	0.132	0.1722	87.814
70.0	9.4503	33.9273	26.207	181.46	0.150	0.1967	87.487
80.0	9.3471	33.9474	26.240	178.55	0.168	0.1955	87.463
90.0	9.2656	33.9571	26.261	176.76	0.186	0.1897	87.158
100.0	9.1438	33.9779	26.297	173.52	0.203	0.1862	87.480
120.0	9.0639	33.9929	26.322	171.56	0.238	0.1848	87.787
140.0	8.8917	34.0230	26.373	167.06	0.272	0.1808	88.147
160.0	8.6434	34.0181	26.408	164.04	0.305	0.1375	88.938
180.0	8.5134	34.0504	26.454	160.05	0.337	0.1425	88.991
200.0	8.5005	34.1052	26.499	156.14	0.369	0.1836	88.833
250.0	7.9936	34.1516	26.612	146.09	0.444	0.1428	88.881
300.0	7.8303	34.1689	26.651	143.26	0.516	0.1316	88.958
350.0	7.6656	34.1715	26.677	141.51	0.588	0.1089	88.910
400.0	7.4356	34.1977	26.732	137.06	0.657	0.0960	88.904
450.0	6.9849	34.2196	26.812	129.85	0.724	0.0498	89.160
500.0	6.6225	34.2350	26.874	124.43	0.787	0.0127	89.135
550.0	6.4226	34.2475	26.910	121.48	0.848	-0.0043	89.150
600.0	5.8742	34.2781	27.005	112.56	0.906	-0.0502	88.939
650.0	5.5986	34.2990	27.055	108.05	0.961	-0.0678	88.965
700.0	5.3024	34.3228	27.110	103.07	1.014	-0.0846	88.811
751.0	4.9362	34.3503	27.175	96.99	1.065	-0.1053	88.567

STATION: 80  
LAT: 36° 45.1 N

DATE: 29-July-1996 1336 UTC  
LON: 122° 17.0 W

P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$	%Trans
3.0	13.0249	33.7575	25.426	254.31	0.008	0.7223	78.680
5.0	13.0230	33.7565	25.426	254.40	0.013	0.7211	78.722
10.0	12.3946	33.7442	25.539	243.73	0.025	0.5860	80.846
15.0	11.9458	33.7668	25.642	234.04	0.037	0.5165	82.825
20.0	11.4830	33.7604	25.724	226.44	0.049	0.4237	82.598
25.0	11.2971	33.7577	25.756	223.51	0.060	0.3869	83.326
30.0	10.9571	33.7486	25.810	218.46	0.071	0.3173	85.462
40.0	10.1465	33.7351	25.941	206.21	0.092	0.1627	88.070
50.0	9.8834	33.7894	26.028	198.14	0.112	0.1604	88.141
60.0	9.7044	33.8430	26.099	191.52	0.132	0.1725	88.031
70.0	9.6696	33.8797	26.134	188.44	0.151	0.1955	87.895
80.0	9.5556	33.9139	26.180	184.30	0.170	0.2034	88.115
90.0	9.4030	33.9388	26.224	180.25	0.188	0.1977	87.807
100.0	9.2989	33.9553	26.254	177.59	0.206	0.1935	87.394
120.0	9.1609	33.9789	26.295	174.09	0.241	0.1893	87.856
140.0	8.9375	34.0134	26.358	168.48	0.275	0.1804	87.903
160.0	8.6804	34.0499	26.427	162.23	0.308	0.1685	88.801
180.0	8.5514	34.0944	26.482	157.35	0.340	0.1832	88.706
200.0	8.3675	34.1269	26.536	152.56	0.371	0.1803	88.910
250.0	8.1093	34.1479	26.592	148.06	0.446	0.1570	88.835
300.0	7.8087	34.1698	26.655	142.89	0.519	0.1291	88.857
350.0	7.4768	34.1988	26.726	136.78	0.589	0.1034	89.035
400.0	7.1015	34.2092	26.787	131.50	0.656	0.0583	89.041
450.0	6.9219	34.2234	26.824	128.69	0.721	0.0442	89.159
500.0	6.5019	34.2434	26.896	122.17	0.784	0.0034	89.197
550.0	6.0541	34.2497	26.959	116.39	0.844	-0.0496	89.402
600.0	5.7998	34.2878	27.021	110.88	0.901	-0.0517	89.252
650.0	5.5890	34.3091	27.065	107.17	0.955	-0.0610	89.271
700.0	5.3536	34.3256	27.106	103.51	1.008	-0.0764	89.299
750.0	5.1134	34.3431	27.149	99.73	1.059	-0.0909	88.919
800.0	4.8459	34.3593	27.192	95.72	1.108	-0.1088	88.852
850.0	4.5278	34.3894	27.252	90.06	1.154	-0.1202	88.671
900.0	4.2581	34.4190	27.304	85.07	1.198	-0.1257	88.366
950.0	4.0372	34.4385	27.343	81.42	1.239	-0.1334	87.555
1000.0	3.8214	34.4603	27.383	77.66	1.279	-0.1381	87.604
1019.0	3.7378	34.4667	27.396	76.36	1.294	-0.1414	88.157

**STATION: 81**  
**LAT: 36° 41.9 N**

**DATE: 29-July-1996 1509 UTC**  
**LON: 122° 10.8 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$	%Trans
3.0	14.0527	33.7380	25.202	275.66	0.008	0.9205	77.462
5.0	14.0413	33.7370	25.203	275.56	0.014	0.9172	77.494
10.0	12.5592	33.6390	25.425	254.58	0.027	0.5360	81.219
15.0	11.5453	33.7009	25.666	231.81	0.039	0.3885	83.976
20.0	11.3256	33.7195	25.721	226.72	0.051	0.3621	85.866
25.0	10.8337	33.6808	25.779	221.28	0.062	0.2414	87.436
30.0	10.5884	33.6882	25.828	216.72	0.073	0.2032	87.908
40.0	10.4694	33.7574	25.903	209.84	0.094	0.2368	88.093
50.0	10.0854	33.7806	25.987	202.04	0.115	0.1881	88.364
60.0	9.6368	33.7692	26.053	195.92	0.135	0.1027	88.828
70.0	9.4228	33.8149	26.124	189.37	0.154	0.1032	88.942
80.0	9.3044	33.8386	26.162	185.96	0.173	0.1023	88.950
90.0	9.1683	33.8666	26.206	181.97	0.191	0.1022	88.950
100.0	9.0413	33.8997	26.252	177.76	0.209	0.1078	88.945
120.0	8.9163	33.9380	26.302	173.38	0.244	0.1178	88.898
140.0	8.7729	33.9827	26.360	168.25	0.278	0.1301	88.850
160.0	8.6960	34.0273	26.407	164.15	0.312	0.1530	88.835
180.0	8.5482	34.0810	26.472	158.30	0.344	0.1722	88.996
200.0	8.1460	34.0626	26.519	154.07	0.375	0.0959	89.234
250.0	7.6201	34.0863	26.615	145.59	0.450	0.0364	89.315
300.0	7.7527	34.1784	26.669	141.44	0.522	0.1277	88.967
350.0	7.5318	34.2160	26.732	136.29	0.591	0.1248	89.421
400.0	6.7108	34.1369	26.783	131.50	0.658	-0.0518	89.405
450.0	6.8704	34.2295	26.835	127.52	0.723	0.0421	89.316
500.0	6.3835	34.2486	26.916	120.19	0.785	-0.0079	89.055
550.0	5.8762	34.2669	26.995	112.80	0.843	-0.0582	88.706
600.0	5.4775	34.3016	27.071	105.72	0.898	-0.0797	88.886
650.0	5.2161	34.3256	27.122	101.21	0.950	-0.0919	88.938
700.0	5.1242	34.3373	27.142	99.75	1.000	-0.0937	88.992
750.0	4.9437	34.3524	27.175	96.92	1.050	-0.1028	88.925
800.0	4.7682	34.3643	27.205	94.38	1.097	-0.1134	88.482
850.0	4.5191	34.3886	27.252	90.01	1.143	-0.1217	88.684
900.0	4.2270	34.4213	27.309	84.52	1.187	-0.1271	88.324
950.0	4.0076	34.4467	27.353	80.46	1.228	-0.1299	87.568
971.0	3.8440	34.4601	27.380	77.71	1.245	-0.1358	87.734

**STATION: 82**  
**LAT: 36° 45.5 N**

**DATE: 29-July-1996 1619 UTC**  
**LON: 122° 14.0 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$	%Trans
3.0	13.4239	33.7533	25.343	262.24	0.008	0.8007	74.660
5.0	13.1890	33.6983	25.348	261.84	0.013	0.7090	77.319
10.0	12.1558	33.6928	25.545	243.19	0.026	0.4990	82.392
15.0	11.7829	33.7128	25.631	235.12	0.038	0.4428	83.701
20.0	11.5790	33.7198	25.674	231.11	0.049	0.4097	84.453
25.0	11.0465	33.6925	25.750	224.02	0.061	0.2892	86.298
30.0	10.2775	33.6550	25.855	214.08	0.072	0.1223	87.918
40.0	9.8773	33.6710	25.936	206.63	0.093	0.0657	88.576
50.0	9.7531	33.7111	25.988	201.87	0.113	0.0763	88.740
60.0	9.5834	33.7673	26.060	195.22	0.133	0.0922	88.792
70.0	9.5670	33.7943	26.084	193.16	0.152	0.1107	88.770
80.0	9.4090	33.8373	26.144	187.68	0.171	0.1185	88.771
90.0	9.3822	33.8853	26.186	183.89	0.190	0.1519	88.879
100.0	9.3493	33.9174	26.216	181.20	0.208	0.1717	88.859
120.0	8.7063	33.9388	26.335	170.16	0.243	0.0852	88.987
140.0	8.4317	33.9784	26.409	163.48	0.277	0.0737	89.087
160.0	8.2831	34.0133	26.459	159.06	0.309	0.0783	89.152
180.0	8.1427	34.0340	26.497	155.81	0.341	0.0731	89.097
200.0	8.2061	34.0821	26.526	153.50	0.371	0.1204	88.999
250.0	8.1835	34.1405	26.576	149.69	0.447	0.1624	89.184
300.0	7.9130	34.1883	26.654	143.03	0.520	0.1590	89.279
350.0	7.5607	34.1975	26.713	138.07	0.591	0.1144	89.366
400.0	7.2607	34.2109	26.767	133.60	0.659	0.0818	89.131
450.0	6.7448	34.1843	26.817	129.15	0.724	-0.0105	89.350
500.0	6.6426	34.2336	26.870	124.81	0.788	0.0142	88.714
550.0	6.4297	34.2472	26.909	121.59	0.850	-0.0036	88.990
600.0	6.0156	34.2650	26.977	115.39	0.909	-0.0430	88.973
650.0	5.7045	34.2944	27.039	109.76	0.965	-0.0586	88.928
700.0	5.3838	34.3183	27.097	104.44	1.019	-0.0786	88.848
733.0	4.9196	34.3537	27.179	96.34	1.052	-0.1043	88.124

**STATION: 83**  
**LAT: 36° 45.5 N**

**DATE: 29-July-1996 1729 UTC**  
**LON: 122° 8.3 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_e$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$	%Trans
3.0	14.1042	33.7469	25.198	276.03	0.008	0.9385	75.866
5.0	14.0281	33.7472	25.214	274.55	0.014	0.9224	75.420
10.0	13.3617	33.7201	25.330	263.66	0.027	0.7616	80.070
15.0	12.4265	33.7171	25.512	246.43	0.040	0.5707	80.399
20.0	11.4240	33.7228	25.705	228.19	0.052	0.3830	83.387
25.0	11.3124	33.7167	25.721	226.81	0.063	0.3573	85.059
30.0	10.9121	33.7229	25.798	219.60	0.074	0.2888	87.196
40.0	10.7451	33.7369	25.839	215.95	0.096	0.2696	87.858
50.0	10.4891	33.7878	25.923	208.13	0.117	0.2641	88.250
60.0	10.3799	33.8156	25.964	204.47	0.138	0.2667	88.340
70.0	10.1047	33.8016	26.000	201.20	0.158	0.2076	88.513
80.0	9.5891	33.7860	26.074	194.30	0.178	0.1077	88.863
90.0	9.6180	33.8309	26.105	191.63	0.197	0.1479	88.826
100.0	9.3642	33.8551	26.165	186.04	0.216	0.1249	88.943
120.0	9.0254	33.9175	26.269	176.56	0.252	0.1190	88.950
140.0	8.9188	33.9928	26.345	169.71	0.287	0.1612	88.986
160.0	8.7738	34.0526	26.415	163.45	0.320	0.1852	89.010
180.0	8.6286	34.0978	26.473	158.25	0.353	0.1979	89.104
200.0	8.3818	34.1234	26.531	153.03	0.384	0.1797	89.177
250.0	7.8863	34.1191	26.603	146.94	0.458	0.1012	89.114
300.0	7.6294	34.1605	26.673	141.00	0.530	0.0957	89.182
350.0	7.3266	34.1841	26.736	135.75	0.600	0.0705	89.359
400.0	6.9755	34.1973	26.795	130.63	0.666	0.0316	89.251
450.0	6.7292	34.2275	26.853	125.74	0.731	0.0216	89.340
500.0	6.3694	34.2556	26.923	119.49	0.792	-0.0042	89.286
550.0	6.0250	34.2679	26.977	114.66	0.850	-0.0389	88.995
600.0	5.5712	34.2960	27.056	107.32	0.907	-0.0729	88.572
650.0	5.2686	34.3189	27.110	102.37	0.959	-0.0911	87.916
700.0	4.9752	34.3507	27.170	96.91	1.009	-0.1001	88.593
750.0	4.7313	34.3767	27.218	92.50	1.057	-0.1072	88.716
800.0	4.4778	34.3976	27.263	88.37	1.102	-0.1186	87.902
850.0	4.2898	34.4254	27.306	84.51	1.145	-0.1169	88.475
900.0	4.1059	34.4411	27.338	81.61	1.187	-0.1239	88.029
950.0	3.8893	34.4587	27.374	78.17	1.227	-0.1323	87.669
1000.0	3.7225	34.4697	27.400	75.81	1.265	-0.1405	86.036
1219.0	3.1633	34.5208	27.496	67.12	1.421	-0.1542	84.044

**STATION: 84**  
**LAT: 36° 45.5 N**

**DATE: 29-July-1996 1849 UTC**  
**LON: 122° 14.1 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$	%Trans
3.0	13.6431	33.7619	25.305	265.85	0.008	0.8530	75.227
5.0	13.6250	33.7624	25.309	265.52	0.013	0.8495	75.162
10.0	13.5423	33.7621	25.326	264.06	0.027	0.8319	74.252
15.0	13.5023	33.7624	25.334	263.39	0.040	0.8237	73.343
20.0	13.2306	33.7598	25.387	258.48	0.053	0.7656	75.619
25.0	12.7032	33.7462	25.481	249.64	0.066	0.6482	78.708
30.0	11.9551	33.7350	25.616	236.92	0.078	0.4930	82.234
40.0	10.9780	33.7038	25.771	222.34	0.100	0.2855	86.158
50.0	9.8949	33.6749	25.936	206.81	0.122	0.0716	88.537
60.0	9.6945	33.7115	25.998	201.11	0.142	0.0666	88.739
70.0	9.5878	33.7236	26.026	198.72	0.162	0.0581	88.764
80.0	9.5842	33.7863	26.075	194.21	0.182	0.1070	88.741
90.0	9.4444	33.8279	26.131	189.12	0.201	0.1167	88.767
100.0	9.3528	33.9013	26.203	182.44	0.219	0.1596	88.800
120.0	9.2302	33.9317	26.247	178.65	0.256	0.1633	88.852
140.0	8.6777	33.9407	26.342	169.94	0.290	0.0819	89.037
160.0	8.5161	33.9523	26.376	167.02	0.324	0.0657	89.105
180.0	8.3339	33.9737	26.421	163.08	0.357	0.0543	89.152
200.0	8.2843	34.0664	26.501	155.82	0.389	0.1198	89.198
250.0	8.1940	34.1478	26.580	149.30	0.465	0.1697	89.199
300.0	7.9572	34.1847	26.645	143.94	0.539	0.1627	89.277
350.0	7.6656	34.1852	26.688	140.49	0.610	0.1197	89.313
400.0	7.1827	34.1840	26.756	134.50	0.679	0.0496	89.357
450.0	6.7346	34.2299	26.854	125.63	0.744	0.0242	89.254
500.0	6.2964	34.2590	26.935	118.26	0.805	-0.0109	89.242
550.0	6.0577	34.2632	26.969	115.44	0.863	-0.0385	88.977
600.0	5.9139	34.2722	26.995	113.52	0.921	-0.0499	88.643
650.0	5.6974	34.2888	27.035	110.08	0.976	-0.0639	88.738
700.0	5.1729	34.3300	27.131	100.90	1.030	-0.0939	88.575
735.0	5.0639	34.3406	27.152	99.13	1.065	-0.0983	88.307

STATION: 85  
LAT: 36° 45.5 N

DATE: 29-July-1996 2009 UTC  
LON: 122° 8.3 W

P(dbar)	T(°C)	S(PSS)	$\gamma_\theta$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$	%Trans
3.0	14.0426	33.7133	25.185	277.28	0.008	0.8989	75.801
5.0	12.8601	33.6920	25.408	256.08	0.014	0.6374	79.780
10.0	11.8882	33.6926	25.595	238.41	0.026	0.4473	81.631
15.0	11.3836	33.7013	25.696	228.96	0.038	0.3585	84.665
20.0	11.0457	33.7016	25.757	223.22	0.049	0.2964	86.503
25.0	11.0501	33.7155	25.767	222.38	0.060	0.3081	86.388
30.0	10.9520	33.7230	25.791	220.26	0.071	0.2961	86.731
40.0	10.6178	33.7533	25.874	212.61	0.093	0.2598	88.046
50.0	10.3052	33.8075	25.970	203.63	0.113	0.2474	88.356
60.0	10.0076	33.8183	26.029	198.19	0.134	0.2044	88.497
70.0	9.7738	33.8187	26.069	194.61	0.153	0.1648	88.697
80.0	9.3586	33.8334	26.149	187.19	0.172	0.1071	88.932
90.0	9.2787	33.8510	26.176	184.83	0.191	0.1078	88.973
100.0	9.1869	33.8709	26.206	182.12	0.209	0.1085	88.961
120.0	9.0089	33.9205	26.274	176.08	0.245	0.1187	88.926
140.0	8.8837	33.9462	26.314	172.64	0.280	0.1187	88.868
160.0	8.8039	34.0033	26.372	167.55	0.314	0.1510	88.960
180.0	8.7364	34.0434	26.414	163.91	0.347	0.1718	88.908
200.0	8.6695	34.0856	26.458	160.14	0.379	0.1943	89.050
250.0	8.1712	34.1159	26.558	151.34	0.457	0.1410	89.077
300.0	7.8555	34.1468	26.630	145.27	0.531	0.1178	89.082
350.0	7.6131	34.1656	26.680	141.19	0.603	0.0967	89.252
400.0	7.2641	34.1909	26.750	135.13	0.672	0.0664	89.221
450.0	7.0491	34.2242	26.807	130.40	0.739	0.0623	89.134
500.0	6.5046	34.2439	26.896	122.17	0.802	0.0042	89.234
550.0	6.1841	34.2605	26.951	117.31	0.862	-0.0247	88.866
600.0	5.9339	34.2721	26.993	113.79	0.920	-0.0475	88.831
650.0	5.6023	34.2944	27.051	108.43	0.976	-0.0709	88.490
700.0	5.4216	34.3125	27.088	105.35	1.029	-0.0787	88.258
750.0	5.0624	34.3405	27.152	99.28	1.080	-0.0987	87.582
800.0	4.7569	34.3741	27.214	93.51	1.128	-0.1069	88.163
850.0	4.5096	34.3957	27.259	89.37	1.174	-0.1171	87.889
900.0	4.2978	34.4195	27.301	85.51	1.218	-0.1211	87.554
950.0	4.0982	34.4382	27.337	82.17	1.259	-0.1274	86.261
1000.0	3.9107	34.4563	27.371	79.02	1.300	-0.1324	86.878
1215.0	3.3207	34.5070	27.470	69.95	1.458	-0.1507	81.237

**STATION: 86**  
**LAT: 36° 45.5 N**

**DATE: 29-July-1996 2128 UTC**  
**LON: 122° 14.0 W**

P (dbar)	T (°C)	S (PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma \Delta D$	$\pi$	%Trans
3.0	13.7385	33.7573	25.282	268.05	0.008	0.8693	72.791
5.0	13.6985	33.7532	25.287	267.62	0.013	0.8576	72.489
10.0	13.4794	33.7590	25.336	263.07	0.027	0.8165	73.778
15.0	13.2505	33.7574	25.381	258.91	0.040	0.7679	76.934
20.0	12.9869	33.7500	25.428	254.56	0.053	0.7083	78.632
25.0	12.3224	33.7449	25.554	242.71	0.065	0.5719	81.320
30.0	11.4382	33.7283	25.707	228.25	0.077	0.3899	84.049
40.0	10.1544	33.6823	25.898	210.26	0.099	0.1224	87.787
50.0	10.0207	33.7693	25.989	201.84	0.119	0.1681	88.230
60.0	9.6531	33.7915	26.068	194.52	0.139	0.1231	88.515
70.0	9.5850	33.7936	26.081	193.49	0.159	0.1132	88.658
80.0	9.4915	33.8111	26.110	190.91	0.178	0.1114	88.713
90.0	9.4270	33.8329	26.138	188.48	0.197	0.1178	88.661
100.0	9.3284	33.8997	26.206	182.18	0.215	0.1543	88.680
120.0	8.9537	33.9207	26.283	175.23	0.251	0.1100	88.866
140.0	8.8255	33.9282	26.309	173.09	0.286	0.0953	88.940
160.0	8.5196	33.9568	26.379	166.74	0.320	0.0698	89.039
180.0	8.1798	33.9743	26.445	160.78	0.353	0.0315	89.069
200.0	8.3449	34.0631	26.490	156.95	0.385	0.1265	89.007
250.0	8.1080	34.1242	26.574	149.79	0.461	0.1381	88.633
300.0	7.9396	34.1832	26.646	143.79	0.535	0.1589	89.062
350.0	7.5328	34.1902	26.711	138.22	0.605	0.1046	89.238
400.0	7.0967	34.1952	26.777	132.47	0.673	0.0466	89.089
450.0	6.6111	34.1691	26.822	128.47	0.738	-0.0403	89.216
500.0	6.3738	34.2503	26.918	119.94	0.801	-0.0078	89.218
550.0	5.9619	34.2700	26.987	113.68	0.859	-0.0451	88.937
600.0	5.5746	34.2972	27.056	107.27	0.915	-0.0715	88.562
650.0	5.5065	34.3018	27.069	106.65	0.968	-0.0765	88.358
700.0	5.1944	34.3291	27.128	101.24	1.020	-0.0921	88.274
735.0	4.9452	34.3514	27.174	96.85	1.054	-0.1032	86.785

**STATION: 87**  
**LAT: 36° 45.6 N**

**DATE: 29-July-1996 2236 UTC**  
**LON: 122° 8.4 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$	%Trans
3.0	14.3746	33.7470	25.141	281.44	0.008	0.9966	74.165
5.0	14.3413	33.7453	25.147	280.95	0.014	0.9880	74.249
10.0	12.8928	33.6147	25.341	262.56	0.028	0.5833	78.550
15.0	11.5168	33.6911	25.663	232.03	0.040	0.3754	82.290
20.0	11.1374	33.6962	25.737	225.20	0.052	0.3089	85.813
25.0	10.9487	33.7025	25.775	221.62	0.063	0.2794	86.440
30.0	10.7109	33.7146	25.827	216.82	0.074	0.2459	87.610
40.0	10.3316	33.8015	25.961	204.31	0.095	0.2475	88.269
50.0	10.0838	33.8156	26.014	199.43	0.115	0.2155	88.427
60.0	9.9060	33.8222	26.050	196.27	0.135	0.1901	88.534
70.0	9.4986	33.8233	26.118	189.93	0.154	0.1224	88.826
80.0	9.2691	33.8568	26.182	184.07	0.173	0.1110	88.906
90.0	9.1760	33.8874	26.221	180.55	0.191	0.1199	88.887
100.0	9.0511	33.9295	26.274	175.69	0.209	0.1330	88.900
120.0	8.8795	33.9464	26.315	172.19	0.243	0.1186	88.845
140.0	8.7900	33.9955	26.367	167.56	0.277	0.1429	88.906
160.0	8.7029	34.0556	26.428	162.14	0.311	0.1765	88.889
180.0	8.6452	34.0843	26.460	159.51	0.343	0.1898	88.986
200.0	8.5966	34.1037	26.483	157.70	0.374	0.1972	89.033
250.0	8.1353	34.1325	26.576	149.57	0.451	0.1488	89.160
300.0	7.7764	34.1475	26.642	144.07	0.525	0.1068	89.174
350.0	7.5899	34.1668	26.685	140.77	0.596	0.0943	89.076
400.0	7.2371	34.1912	26.754	134.72	0.665	0.0630	89.016
450.0	7.0219	34.2190	26.807	130.40	0.731	0.0544	88.957
500.0	6.7266	34.2270	26.853	126.45	0.795	0.0201	88.941
550.0	6.3313	34.2503	26.924	120.04	0.856	-0.0139	88.600
600.0	6.1052	34.2636	26.964	116.68	0.915	-0.0328	88.699
650.0	5.7831	34.2814	27.019	111.75	0.973	-0.0593	88.565
700.0	5.4392	34.3142	27.087	105.45	1.027	-0.0753	88.786
750.0	5.1223	34.3335	27.140	100.56	1.078	-0.0975	88.126
800.0	4.9825	34.3502	27.170	98.09	1.128	-0.1006	88.408
850.0	4.7923	34.3689	27.206	94.85	1.177	-0.1076	88.204
900.0	4.5659	34.3922	27.250	90.81	1.223	-0.1143	87.971
950.0	4.3601	34.4120	27.288	87.28	1.267	-0.1210	87.357
1000.0	4.2101	34.4286	27.318	84.68	1.310	-0.1240	87.391
1187.0	3.5421	34.4862	27.432	73.90	1.460	-0.1462	80.813

**STATION: 88**  
**LAT: 36° 45.5 N**

**DATE: 29-July-1996 2355 UTC**  
**LON: 122° 13.9 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$	%Trans
3.0	13.7919	33.7573	25.271	269.10	0.008	0.8805	70.737
5.0	13.7851	33.7554	25.271	269.16	0.013	0.8775	70.763
10.0	13.5104	33.7446	25.319	264.73	0.027	0.8115	73.948
15.0	12.2972	33.6729	25.503	247.32	0.040	0.5104	81.277
20.0	11.3944	33.7124	25.703	228.44	0.051	0.3692	84.552
25.0	11.2868	33.7154	25.725	226.46	0.063	0.3515	85.380
30.0	11.0030	33.7226	25.781	221.16	0.074	0.3051	86.643
40.0	10.4011	33.7242	25.888	211.18	0.096	0.1986	87.985
50.0	9.7901	33.7027	25.975	203.08	0.116	0.0759	88.697
60.0	9.6466	33.7556	26.041	197.08	0.136	0.0935	88.833
70.0	9.5229	33.8078	26.102	191.45	0.156	0.1142	88.812
80.0	9.4118	33.8493	26.153	186.83	0.175	0.1285	88.795
90.0	9.3209	33.9123	26.217	180.94	0.193	0.1632	88.844
100.0	9.0550	33.9155	26.262	176.80	0.211	0.1225	88.867
120.0	8.7178	33.9454	26.339	169.83	0.246	0.0923	89.020
140.0	8.3780	33.9885	26.425	161.94	0.279	0.0735	89.072
160.0	8.2476	34.0115	26.463	158.67	0.311	0.0714	89.114
180.0	8.0403	34.0269	26.507	154.86	0.342	0.0522	89.149
200.0	8.1775	34.0823	26.530	153.07	0.373	0.1162	89.007
250.0	7.9993	34.1424	26.604	146.85	0.448	0.1363	88.856
300.0	7.8117	34.1828	26.664	141.97	0.520	0.1398	89.170
350.0	7.5189	34.1964	26.718	137.55	0.590	0.1075	89.298
400.0	7.1525	34.1964	26.770	133.16	0.658	0.0553	89.099
450.0	6.5924	34.1643	26.821	128.58	0.724	-0.0465	89.407
500.0	6.4440	34.2223	26.887	122.96	0.786	-0.0208	89.313
550.0	6.1386	34.2640	26.960	116.45	0.846	-0.0277	89.156
600.0	5.7994	34.2844	27.019	111.12	0.903	-0.0544	88.949
650.0	5.5273	34.3004	27.065	107.02	0.957	-0.0752	88.533
700.0	5.0998	34.3380	27.146	99.39	1.008	-0.0960	88.563
751.0	4.9960	34.3477	27.166	97.93	1.059	-0.1006	88.425

STATION: 89  
LAT: 36° 45.5 N

DATE: 30-July-1996 0105 UTC  
LON: 122° 8.4 W

P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$	%Trans
3.0	14.1133	33.7380	25.189	276.87	0.008	0.9334	72.854
5.0	14.0941	33.7374	25.193	276.58	0.014	0.9288	72.988
10.0	13.6739	33.7302	25.274	268.98	0.028	0.8345	74.974
15.0	12.0770	33.7240	25.584	239.56	0.040	0.5080	77.819
20.0	11.3052	33.7151	25.721	226.69	0.052	0.3548	84.279
25.0	11.1580	33.7282	25.758	223.29	0.063	0.3379	85.826
30.0	11.1407	33.7332	25.765	222.74	0.074	0.3386	86.080
40.0	10.7454	33.7372	25.839	215.94	0.096	0.2699	87.642
50.0	10.6056	33.7425	25.868	213.42	0.118	0.2489	87.854
60.0	10.2745	33.7752	25.951	205.72	0.139	0.2164	88.342
70.0	9.9849	33.8296	26.042	197.19	0.159	0.2093	88.494
80.0	9.5723	33.8350	26.115	190.41	0.178	0.1438	88.708
90.0	9.2305	33.8745	26.202	182.34	0.197	0.1186	88.894
100.0	8.9979	33.9031	26.262	176.84	0.215	0.1035	88.910
120.0	8.9984	33.9688	26.313	172.34	0.249	0.1553	88.750
140.0	8.8547	34.0161	26.373	167.01	0.283	0.1695	88.826
160.0	8.7765	34.0705	26.429	162.15	0.316	0.1998	88.855
180.0	8.6203	34.0854	26.465	159.05	0.348	0.1868	88.969
200.0	8.5591	34.1029	26.488	157.20	0.380	0.1907	89.029
250.0	8.1379	34.1283	26.573	149.93	0.457	0.1458	89.165
300.0	7.7935	34.1731	26.659	142.42	0.530	0.1295	89.174
350.0	7.4540	34.1805	26.715	137.81	0.601	0.0857	88.805
400.0	7.0206	34.1910	26.784	131.72	0.668	0.0329	89.181
450.0	6.7333	34.2090	26.838	127.16	0.732	0.0075	88.960
500.0	6.3668	34.2466	26.916	120.12	0.794	-0.0116	88.749
550.0	6.1978	34.2588	26.948	117.62	0.853	-0.0243	88.907
600.0	5.9557	34.2749	26.992	113.87	0.912	-0.0426	88.894
650.0	5.6236	34.2926	27.047	108.84	0.967	-0.0698	88.611
700.0	5.3552	34.3141	27.097	104.38	1.021	-0.0852	88.159
750.0	5.1454	34.3308	27.135	101.05	1.072	-0.0969	87.972
800.0	4.9433	34.3538	27.177	97.34	1.122	-0.1022	88.434
850.0	4.7142	34.3787	27.223	93.15	1.169	-0.1084	88.730
900.0	4.5775	34.3901	27.247	91.11	1.215	-0.1147	88.094
950.0	4.3733	34.4123	27.287	87.42	1.260	-0.1194	87.788
1000.0	4.1725	34.4336	27.326	83.85	1.303	-0.1239	87.635
1177.0	3.4803	34.4927	27.443	72.62	1.444	-0.1468	80.482

**STATION: 90**  
**LAT: 36° 45.5 N**

**DATE: 30-July-1996 0222 UTC**  
**LON: 122° 14.0 W**

P (dbar)	T (°C)	S (PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$	%Trans
3.0	13.6183	33.7580	25.307	265.66	0.008	0.8447	73.611
5.0	13.6214	33.7580	25.306	265.77	0.013	0.8453	73.564
10.0	13.6096	33.7570	25.308	265.74	0.027	0.8419	73.708
15.0	13.5975	33.7569	25.311	265.64	0.040	0.8392	73.673
20.0	13.5166	33.7509	25.323	264.64	0.053	0.8175	73.768
25.0	13.0185	33.7221	25.401	257.34	0.066	0.6925	76.978
30.0	12.4594	33.7223	25.510	247.01	0.079	0.5809	81.348
40.0	11.5382	33.7089	25.674	231.66	0.103	0.3929	84.168
50.0	10.0520	33.7355	25.957	204.86	0.125	0.1466	88.517
60.0	9.6758	33.7570	26.037	197.44	0.145	0.0995	88.798
70.0	9.5445	33.7994	26.092	192.42	0.164	0.1110	88.822
80.0	9.4736	33.8274	26.126	189.42	0.183	0.1214	88.771
90.0	9.3668	33.8837	26.187	183.78	0.202	0.1481	88.837
100.0	9.2309	33.9095	26.229	179.94	0.220	0.1462	88.825
120.0	8.8179	33.9641	26.338	169.95	0.255	0.1228	88.922
140.0	8.7753	34.0317	26.398	164.65	0.289	0.1692	88.298
160.0	8.6426	34.0470	26.431	161.88	0.321	0.1602	88.438
180.0	8.5454	34.0718	26.466	158.94	0.354	0.1644	88.842
200.0	8.1597	34.0384	26.498	156.07	0.385	0.0788	88.951
250.0	7.9501	34.1532	26.620	145.34	0.460	0.1375	88.408
300.0	7.8182	34.1871	26.667	141.74	0.532	0.1442	88.806
350.0	7.3853	34.1990	26.739	135.47	0.601	0.0905	88.691
400.0	7.1082	34.1977	26.777	132.45	0.668	0.0501	88.864
450.0	6.6393	34.1935	26.838	127.04	0.733	-0.0173	89.070
500.0	6.4816	34.2356	26.893	122.47	0.796	-0.0054	88.975
550.0	6.1728	34.2584	26.951	117.32	0.856	-0.0277	88.766
600.0	5.9415	34.2726	26.992	113.86	0.913	-0.0462	88.600
650.0	5.5069	34.3031	27.070	106.56	0.968	-0.0755	88.022
700.0	5.1943	34.3307	27.129	101.12	1.020	-0.0909	87.917
747.0	5.0593	34.3407	27.153	99.20	1.068	-0.0989	87.824

STATION: 91  
LAT: 36° 45.5 N

DATE: 30-July-1996 0331 UTC  
LON: 122° 8.4 W

P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$	%Trans
3.0	13.7145	33.7347	25.269	269.25	0.008	0.8465	76.988
5.0	13.7028	33.7335	25.271	269.16	0.013	0.8430	77.038
10.0	13.4055	33.7170	25.319	264.74	0.027	0.7682	77.831
15.0	12.6418	33.6899	25.449	252.41	0.040	0.5918	78.616
20.0	11.5433	33.7074	25.671	231.41	0.052	0.3931	81.756
25.0	11.0909	33.7205	25.764	222.71	0.063	0.3195	86.437
30.0	10.8263	33.7322	25.820	217.46	0.074	0.2806	87.498
40.0	10.1880	33.7393	25.937	206.57	0.095	0.1733	88.287
50.0	9.7445	33.8282	26.081	193.05	0.115	0.1677	88.514
60.0	9.4656	33.8529	26.146	187.03	0.134	0.1406	88.316
70.0	9.2017	33.8946	26.222	180.03	0.153	0.1302	88.197
80.0	9.0992	33.9266	26.264	176.27	0.170	0.1387	88.022
90.0	9.1649	33.9852	26.299	173.12	0.188	0.1955	88.538
100.0	9.1114	34.0172	26.333	170.11	0.205	0.2120	88.603
120.0	8.9165	34.0391	26.381	165.88	0.239	0.1978	88.785
140.0	8.8439	34.0587	26.408	163.69	0.272	0.2014	88.762
160.0	8.8009	34.1114	26.457	159.50	0.304	0.2359	88.770
180.0	8.7882	34.1338	26.477	158.00	0.336	0.2513	88.738
200.0	8.6522	34.1387	26.502	155.94	0.367	0.2335	88.805
250.0	8.2742	34.1470	26.567	150.54	0.444	0.1812	88.933
300.0	7.9158	34.1889	26.654	143.02	0.517	0.1599	89.232
350.0	7.6955	34.2084	26.702	139.20	0.588	0.1424	89.343
400.0	7.2985	34.1997	26.752	134.96	0.656	0.0782	89.194
450.0	6.7690	34.2024	26.828	128.14	0.722	0.0071	88.904
500.0	6.3567	34.2431	26.915	120.24	0.784	-0.0157	88.909
550.0	6.1118	34.2635	26.963	116.14	0.843	-0.0315	88.832
600.0	5.6428	34.2912	27.043	108.60	0.899	-0.0681	88.402
650.0	5.3961	34.3121	27.090	104.48	0.953	-0.0815	87.960
700.0	5.0651	34.3341	27.147	99.25	1.004	-0.1030	88.478
750.0	4.9223	34.3535	27.179	96.57	1.053	-0.1043	88.474
800.0	4.7215	34.3750	27.219	93.01	1.100	-0.1100	88.471
850.0	4.5685	34.3889	27.247	90.60	1.146	-0.1162	88.154
900.0	4.3193	34.4153	27.295	86.08	1.190	-0.1222	87.650
950.0	4.1264	34.4338	27.330	82.84	1.232	-0.1281	86.927
1000.0	4.0018	34.4476	27.354	80.75	1.273	-0.1302	87.526
1181.0	3.1154	34.5220	27.501	66.22	1.408	-0.1573	82.857

**STATION: 92**  
**LAT: 36° 45.5 N**

**DATE: 30-July-1996 0445 UTC**  
**LON: 122° 14.0 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$	%Trans
3.0	13.5267	33.7576	25.325	263.91	0.008	0.8253	74.181
5.0	13.5246	33.7577	25.326	263.91	0.013	0.8249	74.148
10.0	13.4966	33.7568	25.331	263.56	0.026	0.8183	74.219
15.0	13.4486	33.7571	25.341	262.74	0.040	0.8084	74.478
20.0	13.2754	33.7419	25.364	260.65	0.053	0.7606	76.062
25.0	12.9099	33.7341	25.431	254.41	0.066	0.6800	78.517
30.0	12.2645	33.7242	25.549	243.30	0.078	0.5441	82.387
40.0	11.5435	33.7234	25.684	230.67	0.102	0.4054	85.225
50.0	11.1272	33.7332	25.768	222.94	0.124	0.3356	86.247
60.0	10.6737	33.7784	25.884	212.11	0.146	0.2892	87.509
70.0	10.3868	33.7986	25.950	206.05	0.167	0.2542	88.074
80.0	9.9741	33.8036	26.024	199.14	0.187	0.1866	88.427
90.0	9.7305	33.7927	26.056	196.24	0.207	0.1365	88.695
100.0	9.4163	33.8172	26.127	189.67	0.226	0.1034	88.835
120.0	9.0384	33.9148	26.265	176.96	0.263	0.1189	88.897
140.0	8.7663	33.9816	26.360	168.24	0.298	0.1282	88.934
160.0	8.7444	34.0137	26.389	165.88	0.331	0.1499	88.918
180.0	8.5842	34.0540	26.446	160.84	0.364	0.1564	88.998
200.0	8.4611	34.0766	26.483	157.68	0.396	0.1549	89.052
250.0	8.2351	34.1385	26.566	150.60	0.473	0.1686	89.146
300.0	7.8993	34.1441	26.621	146.10	0.547	0.1221	89.173
350.0	7.6270	34.1739	26.685	140.77	0.619	0.1052	89.164
400.0	7.3148	34.1937	26.745	135.63	0.688	0.0758	89.216
450.0	6.8670	34.1960	26.810	129.96	0.754	0.0152	89.211
500.0	6.4729	34.2172	26.879	123.72	0.818	-0.0210	89.333
550.0	6.1326	34.2608	26.958	116.60	0.878	-0.0309	89.035
600.0	6.0401	34.2648	26.973	115.73	0.936	-0.0400	88.637
650.0	5.5882	34.2942	27.053	108.27	0.992	-0.0729	88.047
700.0	5.3306	34.3178	27.103	103.80	1.045	-0.0852	88.276
741.0	5.1375	34.3326	27.137	100.71	1.088	-0.0963	87.870

**STATION: 93**  
**LAT: 36° 45.6 N**

**DATE: 30-July-1996 0556 UTC**  
**LON: 122° 8.3 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$	%Trans
3.0	13.5597	33.7285	25.296	266.69	0.008	0.8093	79.283
5.0	13.5592	33.7289	25.296	266.70	0.013	0.8095	79.233
10.0	13.5532	33.7280	25.297	266.78	0.027	0.8074	79.488
15.0	13.5178	33.7277	25.304	266.24	0.040	0.7996	79.801
20.0	13.2896	33.7030	25.331	263.79	0.053	0.7330	79.908
25.0	12.5171	33.6926	25.476	250.14	0.066	0.5689	80.441
30.0	11.7769	33.6774	25.605	237.97	0.078	0.4133	80.779
40.0	11.4394	33.6958	25.682	230.90	0.102	0.3640	83.362
50.0	10.9429	33.7112	25.784	221.42	0.124	0.2847	86.281
60.0	10.4808	33.7255	25.876	212.80	0.146	0.2131	87.950
70.0	10.0598	33.7477	25.966	204.47	0.167	0.1572	88.373
80.0	9.6192	33.8419	26.113	190.64	0.187	0.1570	88.454
90.0	9.3802	33.8586	26.165	185.84	0.206	0.1305	88.344
100.0	9.2642	33.8974	26.215	181.36	0.224	0.1420	88.301
120.0	9.2570	33.9991	26.296	174.08	0.260	0.2209	88.626
140.0	9.1008	34.0381	26.352	169.14	0.294	0.2262	88.629
160.0	8.9235	34.0458	26.386	166.22	0.327	0.2035	88.743
180.0	8.8664	34.0784	26.421	163.30	0.360	0.2199	88.691
200.0	8.7843	34.1175	26.465	159.51	0.393	0.2375	88.577
250.0	8.5043	34.1572	26.540	153.23	0.471	0.2244	88.868
300.0	7.8516	34.1801	26.656	142.74	0.545	0.1435	89.152
350.0	7.7075	34.2094	26.701	139.30	0.615	0.1449	89.279
400.0	7.2667	34.1847	26.745	135.63	0.684	0.0619	89.176
450.0	6.8679	34.2122	26.822	128.77	0.750	0.0281	89.110
500.0	6.4144	34.2438	26.908	120.97	0.813	-0.0077	88.792
550.0	6.1784	34.2607	26.952	117.22	0.872	-0.0252	88.902
600.0	5.8344	34.2808	27.012	111.84	0.930	-0.0529	88.803
650.0	5.4939	34.3041	27.072	106.32	0.984	-0.0763	88.521
700.0	5.2538	34.3202	27.114	102.65	1.037	-0.0923	87.934
750.0	4.9776	34.3508	27.170	97.45	1.087	-0.1002	88.542
800.0	4.6480	34.3809	27.231	91.67	1.134	-0.1134	87.632
850.0	4.3572	34.4129	27.289	86.25	1.178	-0.1197	87.814
900.0	4.1362	34.4350	27.330	82.42	1.220	-0.1257	87.334
950.0	3.9416	34.4547	27.366	79.09	1.261	-0.1303	87.578
1000.0	3.7637	34.4663	27.393	76.54	1.300	-0.1391	86.806
1197.0	3.3504	34.5039	27.465	70.40	1.444	-0.1503	84.064

**STATION: 94**  
**LAT: 36° 45.5 N**

**DATE: 30-July-1996 0711 UTC**  
**LON: 122° 13.9 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$	%Trans
3.0	13.6303	33.7614	25.307	265.64	0.008	0.8499	76.100
5.0	13.6270	33.7613	25.308	265.64	0.013	0.8491	76.159
10.0	13.4016	33.7559	25.349	261.80	0.026	0.7979	76.743
15.0	12.7645	33.7293	25.456	251.79	0.039	0.6473	80.808
20.0	12.1003	33.7204	25.577	240.37	0.052	0.5095	83.353
25.0	11.6237	33.7260	25.671	231.56	0.063	0.4228	85.094
30.0	10.9748	33.7540	25.811	218.37	0.075	0.3248	86.747
40.0	10.4093	33.7802	25.931	207.16	0.096	0.2443	87.913
50.0	10.0998	33.7542	25.964	204.24	0.116	0.1697	88.243
60.0	9.6961	33.7505	26.029	198.24	0.137	0.0978	88.629
70.0	9.5507	33.8010	26.092	192.39	0.156	0.1134	88.600
80.0	9.3975	33.8233	26.135	188.54	0.175	0.1055	88.750
90.0	9.2367	33.8615	26.191	183.40	0.194	0.1093	88.783
100.0	8.9978	33.9243	26.278	175.26	0.212	0.1203	88.732
120.0	8.9147	33.9456	26.308	172.78	0.246	0.1236	88.766
140.0	8.7472	34.0177	26.391	165.27	0.280	0.1538	88.771
160.0	8.5602	34.0457	26.443	160.74	0.313	0.1464	88.780
180.0	8.4621	34.0672	26.475	158.04	0.344	0.1479	88.628
200.0	8.0672	34.0536	26.524	153.59	0.376	0.0770	88.768
250.0	8.1011	34.1550	26.599	147.41	0.451	0.1614	88.970
300.0	7.7575	34.1524	26.648	143.44	0.523	0.1079	89.016
350.0	7.5545	34.1744	26.696	139.70	0.594	0.0952	89.017
400.0	7.2604	34.1987	26.757	134.50	0.663	0.0720	88.960
450.0	6.7365	34.1987	26.829	127.97	0.729	-0.0002	89.232
500.0	6.3744	34.2435	26.913	120.45	0.791	-0.0131	89.226
550.0	5.9185	34.2740	26.995	112.82	0.849	-0.0473	88.855
600.0	5.7966	34.2842	27.019	111.10	0.905	-0.0549	88.868
650.0	5.6934	34.2907	27.037	109.88	0.960	-0.0629	88.611
700.0	5.4257	34.3091	27.085	105.66	1.014	-0.0809	88.135
745.0	5.2459	34.3265	27.120	102.58	1.061	-0.0887	88.357

**STATION: 95**  
**LAT: 36° 45.5 N**

**DATE: 30-July-1996 0827 UTC**  
**LON: 122° 8.3 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_e$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma \Delta D$	$\pi$	%Trans
3.0	13.5385	33.7288	25.301	266.26	0.008	0.8051	79.956
5.0	13.5330	33.7277	25.301	266.28	0.013	0.8031	79.981
10.0	12.1343	33.6306	25.500	247.42	0.026	0.4458	81.187
15.0	11.5707	33.6870	25.650	233.28	0.038	0.3822	82.510
20.0	11.3538	33.7118	25.709	227.78	0.050	0.3612	83.795
25.0	11.2126	33.7157	25.738	225.16	0.061	0.3381	84.698
30.0	10.8467	33.7146	25.803	219.11	0.072	0.2703	86.614
40.0	10.4926	33.7280	25.876	212.40	0.094	0.2176	87.956
50.0	9.9177	33.7574	25.997	201.07	0.115	0.1410	88.407
60.0	9.8358	33.7656	26.017	199.34	0.135	0.1333	88.553
70.0	9.7192	33.7926	26.058	195.68	0.154	0.1349	88.387
80.0	9.6434	33.8296	26.099	191.93	0.174	0.1513	88.385
90.0	9.5197	33.8408	26.129	189.35	0.193	0.1394	88.364
100.0	9.3057	33.8517	26.172	185.38	0.211	0.1126	88.529
120.0	9.4088	33.9717	26.250	178.47	0.248	0.2242	88.645
140.0	9.2144	34.0180	26.318	172.40	0.283	0.2286	88.685
160.0	8.9351	34.0342	26.375	167.26	0.317	0.1962	88.590
180.0	8.8326	34.0710	26.420	163.33	0.350	0.2087	88.704
200.0	8.8391	34.1279	26.464	159.58	0.382	0.2543	88.709
250.0	8.5350	34.1490	26.529	154.29	0.461	0.2227	88.730
300.0	8.0270	34.1693	26.622	146.10	0.536	0.1608	89.112
350.0	7.7955	34.1989	26.680	141.35	0.608	0.1494	89.255
400.0	7.5411	34.2136	26.729	137.39	0.678	0.1235	89.313
450.0	7.1121	34.2025	26.781	132.89	0.745	0.0538	89.107
500.0	6.6891	34.2029	26.839	127.72	0.810	-0.0038	89.031
550.0	6.3675	34.2475	26.917	120.74	0.873	-0.0115	88.626
600.0	6.0964	34.2652	26.967	116.45	0.932	-0.0327	88.731
650.0	5.7729	34.2820	27.021	111.57	0.989	-0.0601	88.684
700.0	5.5993	34.2986	27.056	108.68	1.044	-0.0686	88.679
750.0	5.1218	34.3348	27.141	100.45	1.097	-0.0965	88.107
800.0	4.6954	34.3782	27.224	92.45	1.145	-0.1104	88.726
850.0	4.4743	34.3960	27.263	88.92	1.190	-0.1207	87.728
900.0	4.3516	34.4120	27.289	86.72	1.234	-0.1215	87.639
950.0	4.1533	34.4322	27.326	83.28	1.277	-0.1265	87.194
1000.0	3.9732	34.4473	27.357	80.43	1.318	-0.1333	86.624
1191.0	3.4932	34.4907	27.440	73.02	1.464	-0.1473	82.378

**STATION: 96**  
**LAT: 36° 45.5 N**

**DATE: 30-July-1996 0944 UTC**  
**LON: 122° 14.0 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$	%Trans
3.0	13.9330	33.7541	25.239	272.11	0.008	0.9078	76.927
5.0	13.8174	33.7521	25.261	270.03	0.014	0.8817	77.029
10.0	13.4578	33.7360	25.323	264.34	0.027	0.7939	77.435
15.0	11.8779	33.6619	25.574	240.57	0.040	0.4206	83.146
20.0	11.3934	33.6820	25.679	230.67	0.051	0.3451	85.028
25.0	10.9327	33.7173	25.790	220.25	0.063	0.2882	86.924
30.0	10.6638	33.7481	25.861	213.55	0.073	0.2641	87.571
40.0	10.3413	33.7665	25.932	207.05	0.094	0.2215	88.156
50.0	9.8580	33.7838	26.027	198.15	0.115	0.1517	88.508
60.0	9.6664	33.7857	26.061	195.16	0.134	0.1207	88.721
70.0	9.5808	33.8006	26.087	192.90	0.154	0.1181	88.756
80.0	9.4734	33.8130	26.114	190.49	0.173	0.1099	88.777
90.0	9.3113	33.8428	26.164	185.94	0.192	0.1067	88.864
100.0	9.1912	33.8741	26.208	181.95	0.210	0.1117	88.884
120.0	9.0996	33.9142	26.254	177.94	0.246	0.1283	88.909
140.0	8.9212	33.9774	26.333	170.89	0.281	0.1494	88.896
160.0	8.7596	34.0050	26.380	166.76	0.314	0.1453	88.954
180.0	8.6709	34.0521	26.431	162.29	0.347	0.1683	88.978
200.0	8.5716	34.0733	26.463	159.57	0.380	0.1693	89.007
250.0	8.0334	34.0671	26.540	152.94	0.458	0.0818	89.152
300.0	7.7695	34.1438	26.640	144.25	0.532	0.1028	89.098
350.0	7.4739	34.1880	26.718	137.54	0.603	0.0944	89.195
400.0	6.9602	34.1995	26.799	130.26	0.670	0.0313	89.221
450.0	6.7871	34.2342	26.850	126.03	0.735	0.0346	89.104
500.0	6.4378	34.2433	26.904	121.31	0.797	-0.0050	89.178
550.0	6.1235	34.2653	26.963	116.15	0.856	-0.0286	89.078
600.0	5.8932	34.2786	27.003	112.78	0.914	-0.0474	88.979
650.0	5.6203	34.2960	27.050	108.55	0.969	-0.0675	88.644
700.0	5.2875	34.3204	27.110	103.06	1.022	-0.0882	88.083
737.0	5.1739	34.3312	27.132	101.23	1.059	-0.0932	88.195

**STATION: 97**  
**LAT: 36° 45.5 N**

**DATE: 30-July-1996 1057 UTC**  
**LON: 122° 8.4 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$	%Trans
3.0	13.5063	33.7042	25.288	267.44	0.008	0.7791	80.683
5.0	13.5063	33.7223	25.302	266.16	0.013	0.7933	80.782
10.0	13.4019	33.7154	25.318	264.79	0.027	0.7661	80.814
15.0	12.9329	33.7006	25.401	257.06	0.040	0.6585	81.131
20.0	11.7633	33.6614	25.595	238.71	0.052	0.3985	83.399
25.0	10.8604	33.6962	25.786	220.59	0.064	0.2584	87.461
30.0	10.4742	33.7230	25.875	212.26	0.074	0.2106	88.088
40.0	9.8415	33.7713	26.020	198.62	0.095	0.1392	88.386
50.0	9.6217	33.8139	26.090	192.18	0.115	0.1357	88.393
60.0	9.3566	33.8607	26.170	184.75	0.133	0.1288	88.547
70.0	9.4959	33.9092	26.186	183.52	0.152	0.1900	88.591
80.0	9.4597	33.9281	26.207	181.74	0.170	0.1987	88.550
90.0	9.2611	33.9431	26.251	177.72	0.188	0.1779	88.488
100.0	9.2129	33.9630	26.274	175.69	0.206	0.1856	88.427
120.0	9.1061	33.9982	26.319	171.81	0.240	0.1958	88.471
140.0	8.8384	34.0134	26.374	166.97	0.274	0.1647	88.275
160.0	8.8712	34.0929	26.431	161.93	0.307	0.2325	88.576
180.0	8.8285	34.1242	26.463	159.33	0.339	0.2500	88.587
200.0	8.7559	34.1352	26.483	157.77	0.371	0.2470	88.587
250.0	8.3372	34.1284	26.543	152.86	0.449	0.1760	88.884
300.0	8.1987	34.1644	26.593	149.00	0.524	0.1827	88.940
350.0	7.8181	34.1886	26.669	142.44	0.597	0.1446	89.161
400.0	7.4952	34.2095	26.732	137.03	0.667	0.1138	89.249
450.0	6.8612	34.1983	26.812	129.71	0.733	0.0163	89.049
500.0	6.5907	34.2203	26.866	125.09	0.797	-0.0031	88.961
550.0	6.3534	34.2429	26.916	120.89	0.859	-0.0169	88.845
600.0	6.0792	34.2587	26.964	116.70	0.918	-0.0400	88.785
650.0	5.7372	34.2821	27.025	111.10	0.975	-0.0644	88.559
700.0	5.5248	34.3062	27.071	107.15	1.030	-0.0715	88.654
750.0	5.2068	34.3255	27.124	102.22	1.082	-0.0941	87.749
800.0	4.9169	34.3567	27.182	96.79	1.132	-0.1029	88.232
850.0	4.6752	34.3792	27.228	92.62	1.179	-0.1122	87.720
900.0	4.4784	34.3993	27.265	89.21	1.225	-0.1181	87.226
950.0	4.2791	34.4221	27.305	85.55	1.268	-0.1216	87.508
1000.0	4.0645	34.4421	27.344	81.92	1.310	-0.1283	87.093
1137.0	3.7730	34.4641	27.392	77.92	1.420	-0.1410	83.075

**STATION: 98**  
**LAT: 36° 45.5 N**

**DATE: 30-July-1996 1216 UTC**  
**LON: 122° 14.0 W**

P (dbar)	T (°C)	S (PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$	%Trans
3.0	14.1176	33.7375	25.188	276.99	0.008	0.9339	77.201
5.0	14.1158	33.7410	25.191	276.75	0.014	0.9362	77.296
10.0	13.4337	33.6747	25.280	268.40	0.028	0.7407	79.497
15.0	12.5771	33.6608	25.439	253.35	0.041	0.5559	80.752
20.0	11.6715	33.6712	25.620	236.34	0.053	0.3887	83.439
25.0	11.0589	33.6709	25.731	225.83	0.064	0.2744	86.421
30.0	10.7248	33.6938	25.808	218.59	0.075	0.2321	87.605
40.0	10.1990	33.7291	25.927	207.50	0.097	0.1671	88.247
50.0	9.8986	33.7752	26.014	199.44	0.117	0.1518	88.432
60.0	9.6566	33.8014	26.075	193.84	0.137	0.1315	88.610
70.0	9.4898	33.8042	26.105	191.20	0.156	0.1058	88.755
80.0	9.2966	33.8380	26.163	185.89	0.175	0.1006	88.799
90.0	9.1721	33.8655	26.204	182.11	0.193	0.1020	88.861
100.0	9.0712	33.8871	26.237	179.15	0.211	0.1026	88.837
120.0	8.9873	33.9592	26.307	172.89	0.246	0.1459	88.662
140.0	8.7568	34.0036	26.379	166.46	0.280	0.1441	88.751
160.0	8.7263	34.0467	26.418	163.16	0.313	0.1731	88.844
180.0	8.5897	34.0672	26.455	159.94	0.346	0.1676	88.990
200.0	8.0719	34.0345	26.508	155.08	0.377	0.0626	89.129
250.0	8.1211	34.1442	26.588	148.50	0.453	0.1559	89.031
300.0	7.7438	34.1541	26.652	143.12	0.526	0.1072	88.852
350.0	7.3539	34.1672	26.718	137.39	0.596	0.0610	89.264
400.0	7.1092	34.2029	26.781	132.07	0.663	0.0544	89.079
450.0	6.7820	34.2344	26.851	125.95	0.728	0.0340	89.165
500.0	6.3930	34.2449	26.911	120.59	0.789	-0.0096	89.005
550.0	6.0980	34.2644	26.965	115.89	0.849	-0.0325	89.000
600.0	5.9064	34.2772	27.000	113.06	0.906	-0.0470	88.982
650.0	5.5366	34.2999	27.064	107.18	0.961	-0.0745	88.475
700.0	5.1679	34.3305	27.132	100.81	1.013	-0.0941	88.093
723.0	5.0709	34.3382	27.149	99.27	1.036	-0.0993	87.940

**STATION: 99**  
**LAT: 36° 45.5 N**

**DATE: 30-July-1996 1325 UTC**  
**LON: 122° 8.4 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$	%Trans
3.0	13.6098	33.7473	25.300	266.28	0.008	0.8345	78.423
5.0	13.6103	33.7474	25.300	266.33	0.013	0.8347	78.464
10.0	13.3005	33.7231	25.344	262.29	0.027	0.7515	79.812
15.0	11.7198	33.6629	25.604	237.69	0.039	0.3913	83.150
20.0	11.0724	33.6903	25.744	224.52	0.051	0.2923	85.344
25.0	10.9055	33.6883	25.772	221.94	0.062	0.2603	86.500
30.0	10.5676	33.7188	25.855	214.12	0.073	0.2237	87.785
40.0	10.3160	33.7376	25.914	208.78	0.094	0.1942	88.276
50.0	9.8255	33.7578	26.013	199.56	0.114	0.1256	88.679
60.0	9.4440	33.8002	26.109	190.60	0.134	0.0952	88.709
70.0	9.4524	33.9151	26.197	182.39	0.152	0.1875	88.629
80.0	9.4519	33.9425	26.219	180.55	0.171	0.2088	88.670
90.0	9.3615	33.9705	26.256	177.26	0.188	0.2159	88.686
100.0	9.2953	33.9867	26.279	175.21	0.206	0.2177	88.699
120.0	9.1177	34.0239	26.337	170.08	0.241	0.2180	88.620
140.0	8.9887	34.0503	26.379	166.52	0.274	0.2178	88.702
160.0	8.8953	34.0877	26.423	162.69	0.307	0.2321	88.597
180.0	8.8314	34.1285	26.466	159.05	0.339	0.2539	88.652
200.0	8.6757	34.1475	26.505	155.65	0.371	0.2441	88.695
250.0	8.3833	34.1645	26.564	150.88	0.448	0.2115	88.939
300.0	8.0208	34.1697	26.623	145.98	0.522	0.1602	89.069
350.0	7.6151	34.2155	26.719	137.52	0.593	0.1363	89.333
400.0	7.0850	34.2172	26.796	130.68	0.660	0.0623	89.180
450.0	6.7892	34.2239	26.842	126.82	0.724	0.0267	89.169
500.0	6.3457	34.2492	26.921	119.64	0.786	-0.0123	88.741
550.0	5.9529	34.2695	26.988	113.60	0.844	-0.0467	88.808
600.0	5.8700	34.2880	27.013	111.78	0.900	-0.0429	89.079
650.0	5.5160	34.3090	27.073	106.24	0.954	-0.0698	88.825
700.0	5.0922	34.3362	27.145	99.43	1.006	-0.0982	87.966
750.0	4.9762	34.3503	27.170	97.48	1.055	-0.1008	88.508
800.0	4.8234	34.3648	27.199	95.02	1.103	-0.1068	88.331
850.0	4.7501	34.3748	27.216	93.88	1.151	-0.1075	88.146
900.0	4.4757	34.3960	27.263	89.42	1.196	-0.1210	87.128
950.0	4.1695	34.4320	27.324	83.49	1.240	-0.1250	87.312
1000.0	4.0279	34.4463	27.351	81.17	1.280	-0.1286	87.538
1149.0	3.6880	34.4730	27.407	76.33	1.398	-0.1423	83.180

**STATION: 100**  
**LAT: 36° 45.5 N**

**DATE: 30-July-1996 1439 UTC**  
**LON: 122° 13.9 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$	%Trans
3.0	13.9764	33.7434	25.222	273.76	0.008	0.9085	78.026
5.0	13.9807	33.7457	25.223	273.72	0.014	0.9112	78.200
10.0	13.9557	33.7395	25.223	273.82	0.027	0.9009	79.180
15.0	12.9294	33.6453	25.358	261.07	0.041	0.6142	81.124
20.0	11.5392	33.6487	25.626	235.68	0.053	0.3459	84.001
25.0	11.3650	33.6995	25.698	228.99	0.065	0.3534	84.932
30.0	11.0807	33.6930	25.744	224.68	0.076	0.2958	86.221
40.0	10.5331	33.7009	25.847	215.08	0.098	0.2032	87.730
50.0	10.0830	33.7192	25.939	206.56	0.119	0.1390	88.290
60.0	9.8594	33.7961	26.037	197.46	0.139	0.1615	88.658
70.0	9.7288	33.8376	26.091	192.50	0.159	0.1721	88.667
80.0	9.6149	33.8783	26.142	187.87	0.178	0.1851	88.623
90.0	9.3078	33.8939	26.205	182.10	0.197	0.1465	88.363
100.0	9.1754	33.9220	26.248	178.16	0.215	0.1470	87.825
120.0	8.9923	33.9636	26.310	172.63	0.250	0.1502	87.856
140.0	8.7623	34.0336	26.401	164.31	0.283	0.1688	88.270
160.0	8.5240	34.0479	26.434	161.54	0.316	0.1580	88.388
180.0	8.8410	34.1296	26.465	159.12	0.348	0.2562	88.574
200.0	8.5479	34.1092	26.495	156.55	0.380	0.1941	88.751
250.0	8.1742	34.1457	26.581	149.17	0.456	0.1650	89.031
300.0	7.8165	34.2012	26.678	140.67	0.528	0.1550	89.136
350.0	7.3274	34.1889	26.739	135.40	0.597	0.0744	89.093
400.0	7.0637	34.2113	26.794	130.81	0.664	0.0548	89.126
450.0	6.7318	34.2138	26.842	126.79	0.728	0.0111	89.070
500.0	6.4092	34.2480	26.912	120.58	0.790	-0.0050	88.994
550.0	6.1032	34.2673	26.967	115.74	0.849	-0.0296	89.015
600.0	5.7500	34.2895	27.029	110.11	0.906	-0.0565	88.609
650.0	5.4398	34.3092	27.083	105.25	0.959	-0.0786	88.244
700.0	5.3587	34.3158	27.098	104.31	1.012	-0.0835	87.666
725.0	5.2817	34.3204	27.111	103.27	1.038	-0.0891	87.297

**STATION: 101**  
**LAT: 36° 45.6 N**

**DATE: 30-July-1996 1547 UTC**  
**LON: 122° 8.4 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$	%Trans
3.0	13.5616	33.7574	25.318	264.60	0.008	0.8324	78.260
5.0	13.5620	33.7566	25.317	264.72	0.013	0.8318	78.774
10.0	13.5308	33.7529	25.321	264.51	0.026	0.8223	82.146
15.0	12.5444	33.7026	25.478	249.67	0.039	0.5825	84.750
20.0	11.1653	33.7055	25.739	224.99	0.051	0.3214	85.899
25.0	11.0460	33.7045	25.760	223.13	0.062	0.2986	86.734
30.0	10.8731	33.7403	25.818	217.64	0.073	0.2955	87.396
40.0	10.5907	33.7153	25.849	214.97	0.095	0.2249	87.735
50.0	10.5306	33.7589	25.893	210.95	0.116	0.2486	88.294
60.0	10.0968	33.7306	25.946	206.14	0.137	0.1501	88.527
70.0	9.8027	33.7602	26.019	199.41	0.158	0.1233	88.676
80.0	9.4369	33.8405	26.142	187.88	0.177	0.1256	88.635
90.0	9.4637	33.9363	26.212	181.39	0.195	0.2057	88.596
100.0	9.3103	33.9752	26.268	176.30	0.213	0.2111	88.600
120.0	9.0814	34.0222	26.342	169.65	0.248	0.2108	88.486
140.0	8.8971	34.0571	26.399	164.62	0.281	0.2085	88.042
160.0	8.9249	34.1069	26.434	161.71	0.314	0.2520	88.400
180.0	8.8125	34.1300	26.470	158.65	0.346	0.2521	88.529
200.0	8.6794	34.1497	26.506	155.53	0.377	0.2465	88.583
250.0	8.1899	34.1669	26.595	147.83	0.453	0.1841	88.907
300.0	7.7155	34.2045	26.695	138.97	0.526	0.1429	89.159
350.0	7.3411	34.2205	26.762	133.26	0.594	0.1013	89.233
400.0	7.0061	34.2149	26.805	129.75	0.660	0.0497	89.174
450.0	6.6592	34.2393	26.871	123.91	0.723	0.0215	88.997
500.0	6.3659	34.2471	26.917	120.07	0.784	-0.0113	88.623
550.0	5.9736	34.2710	26.986	113.77	0.843	-0.0429	88.688
600.0	5.5893	34.3076	27.063	106.69	0.898	-0.0616	89.059
650.0	5.3448	34.3170	27.100	103.47	0.950	-0.0836	88.314
700.0	4.9798	34.3511	27.170	96.93	1.000	-0.0992	88.012
750.0	4.7752	34.3723	27.210	93.36	1.048	-0.1058	88.290
800.0	4.5597	34.3830	27.243	90.43	1.094	-0.1213	87.119
850.0	4.3769	34.3973	27.274	87.64	1.139	-0.1299	87.290
900.0	4.2383	34.4221	27.309	84.60	1.182	-0.1253	87.327
950.0	4.0658	34.4380	27.340	81.79	1.223	-0.1308	87.026
1000.0	3.8640	34.4585	27.377	78.31	1.263	-0.1354	87.857
1197.0	3.1220	34.5236	27.501	66.29	1.407	-0.1555	84.891

**STATION: 102**  
**LAT: 36° 45.5 N**

**DATE: 30-July-1996 1703 UTC**  
**LON: 122° 14.0 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$	%Trans
3.0	13.8732	33.7289	25.232	272.78	0.008	0.8753	78.344
5.0	13.8626	33.7296	25.235	272.58	0.014	0.8736	78.368
10.0	13.8509	33.7279	25.236	272.60	0.027	0.8696	78.363
15.0	13.7968	33.7245	25.245	271.92	0.041	0.8554	78.773
20.0	12.5330	33.6123	25.410	256.30	0.054	0.5095	82.785
25.0	11.9461	33.6760	25.572	240.98	0.067	0.4446	83.391
30.0	11.5020	33.6673	25.648	233.88	0.078	0.3534	84.379
40.0	11.0968	33.6795	25.731	226.17	0.101	0.2878	86.032
50.0	10.8375	33.6854	25.782	221.54	0.124	0.2452	86.861
60.0	10.1084	33.6872	25.910	209.53	0.145	0.1178	88.212
70.0	9.9513	33.7360	25.975	203.58	0.166	0.1293	88.471
80.0	9.8505	33.7921	26.036	198.01	0.186	0.1564	88.676
90.0	9.5746	33.8561	26.132	189.07	0.205	0.1607	88.645
100.0	9.2705	33.8746	26.196	183.14	0.224	0.1250	88.081
120.0	8.9788	33.9334	26.289	174.67	0.260	0.1241	87.958
140.0	8.7929	33.9908	26.363	167.95	0.294	0.1397	88.014
160.0	8.6616	34.0416	26.424	162.57	0.327	0.1589	88.027
180.0	8.5744	34.0659	26.457	159.81	0.359	0.1643	87.897
200.0	8.6124	34.1202	26.494	156.71	0.391	0.2127	88.027
250.0	8.3059	34.1357	26.553	151.85	0.468	0.1770	88.081
300.0	7.9932	34.1833	26.638	144.56	0.542	0.1670	89.101
350.0	7.4117	34.2165	26.749	134.55	0.612	0.1081	89.341
400.0	7.0545	34.2137	26.797	130.51	0.678	0.0554	89.212
450.0	6.6234	34.2252	26.865	124.47	0.742	0.0057	88.956
500.0	6.4466	34.2382	26.899	121.81	0.803	-0.0079	88.838
550.0	6.0590	34.2649	26.971	115.33	0.862	-0.0370	88.904
600.0	5.9520	34.2697	26.988	114.21	0.920	-0.0472	88.760
650.0	5.5513	34.2994	27.061	107.41	0.975	-0.0732	87.999
700.0	5.3435	34.3161	27.100	104.09	1.029	-0.0851	88.167
739.0	4.9201	34.3525	27.178	96.50	1.067	-0.1052	87.580

**STATION: 104**  
**LAT: 36° 45.5 N**

**DATE: 30-July-1996 1809 UTC**  
**LON: 122° 8.3 W**

P(dbar)	T(°C)	S(PSS)	$\gamma_0$ (kg m <sup>-3</sup> )	$\delta$	$\Sigma\Delta D$	$\pi$	%Trans
3.0	13.6358	33.7439	25.292	267.03	0.008	0.8373	77.878
5.0	13.6166	33.7450	25.297	266.63	0.013	0.8341	77.494
10.0	13.4997	33.7440	25.320	264.56	0.027	0.8088	77.417
15.0	13.3482	33.7456	25.352	261.65	0.040	0.7787	76.898
20.0	11.7966	33.7218	25.635	234.88	0.052	0.4531	82.780
25.0	11.0168	33.7432	25.795	219.77	0.064	0.3240	85.425
30.0	11.0138	33.7865	25.829	216.62	0.074	0.3576	85.514
40.0	11.0072	33.8064	25.846	215.26	0.096	0.3718	85.682
50.0	10.6222	33.7926	25.904	209.99	0.117	0.2915	86.451
60.0	10.0226	33.7455	25.970	203.83	0.138	0.1493	87.295
70.0	9.5905	33.7844	26.073	194.26	0.158	0.1068	88.430
80.0	9.5301	33.8546	26.138	188.30	0.177	0.1522	88.092
90.0	9.5424	33.8954	26.168	185.66	0.196	0.1863	87.338
100.0	9.4903	33.9226	26.198	183.02	0.214	0.1991	86.971
120.0	9.2856	33.9823	26.278	175.77	0.250	0.2123	87.485
140.0	9.0450	34.0083	26.337	170.50	0.285	0.1936	88.454
160.0	8.7614	34.0168	26.389	165.91	0.318	0.1550	88.568
180.0	8.8614	34.0884	26.430	162.48	0.351	0.2270	88.543
200.0	8.7982	34.1033	26.451	160.78	0.383	0.2284	88.728
250.0	8.2172	34.1054	26.543	152.79	0.462	0.1397	88.905
300.0	7.8758	34.1811	26.654	143.02	0.536	0.1478	89.551
350.0	7.5967	34.2121	26.719	137.51	0.606	0.1310	89.639
400.0	6.8506	34.1581	26.781	131.83	0.673	-0.0163	89.685
450.0	6.7271	34.2163	26.844	126.54	0.738	0.0124	89.530
500.0	6.4517	34.2369	26.898	121.97	0.800	-0.0082	89.175
550.0	6.1333	34.2605	26.958	116.64	0.860	-0.0311	89.050
600.0	5.6209	34.3011	27.054	107.58	0.916	-0.0629	89.279
650.0	5.2465	34.3192	27.113	102.07	0.968	-0.0934	88.598
700.0	4.9285	34.3514	27.176	96.28	1.018	-0.1048	88.585
750.0	4.5502	34.3863	27.246	89.59	1.064	-0.1192	87.266
800.0	4.3674	34.4040	27.280	86.57	1.108	-0.1252	87.548
850.0	4.2090	34.4249	27.314	83.58	1.150	-0.1257	88.186
900.0	4.1147	34.4344	27.332	82.21	1.191	-0.1283	87.854
950.0	3.9334	34.4527	27.365	79.14	1.232	-0.1327	88.498
1000.0	3.7353	34.4655	27.395	76.27	1.271	-0.1425	87.086
1227.0	3.2163	34.5129	27.484	68.37	1.433	-0.1557	84.481

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|    | Dr. Nan Bray  | 1  |
| 7. | Dr. Norman F. Hall (NODC Liaison)<br>NESDIS<br>P.O. Box 271<br>La Jolla, CA 92038-0271                                | 1  |

8. Oceanographer of the Navy 1  
OpNav 096  
3450 Massachusetts Avenue, NW  
Washington, D.C. 20392-5421
9. Hopkins Marine Sciences Library 1  
Biological Sciences Department  
Stanford University  
Pacific Grove, CA 93950
10. Monterey Bay National Marine Sanctuary  
299 Foam Street, Suite D  
Monterey, CA 93940
- Dr. Andrew DeVogelaere 1  
Mr. Aaron King 1
11. Monterey Bay Aquarium Research Institute  
P.O. Box 628  
Moss Landing, CA 95039-0628
- Dr. Francisco Chavez 1
12. United States Geological Survey  
345 Middlefield Road  
Menlo Park, CA 94025
- Dr. Marlene Noble 1
13. Defense Technical Information Center 2  
8725 John J. Kingman Road, STE 0944  
Fort Belvoir, VA 22060-6218